General Motors Upfitter Integration

BODY BUILDER MANUAL

FOR

2018 CHEVROLET LOW CAB FORWARD

MEDIUM DUTY 3500HD
ELECTRICAL SECTION

General Motors Upfitter Integration

Note to User:
As part of our mission to provide an up-to-date website that includes detailed Body Builder Manuals, Technical Bulletins, and Best Practice Manuals, we are now using sectional excerpts directly from the General Motors Service Information publications for our Electrical Body Builder Manuals.

You will note that the section numbers are non-sequential as we have provided only those that are believed to be the most pertinent to the Upfitter community and best suited to their needs.*

This new usage of the Service Information provides the opportunity for us to remain consistent with the changes that take place throughout the model year and to provide you updated information in a more timely fashion.

**** If you would like to have access to all of the electrical Service Information, please apply for a subscription from ACDelco at http://acdelcotechconnect.com/html/tss_tech_esi.jsp***

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General Information

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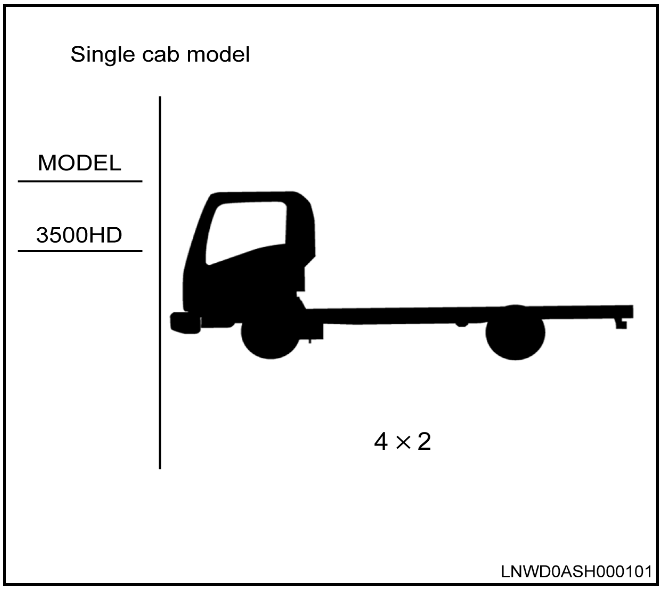
General Information

Introduction

Model Identification

The model covered in this manual is referred to as a 3500HD.



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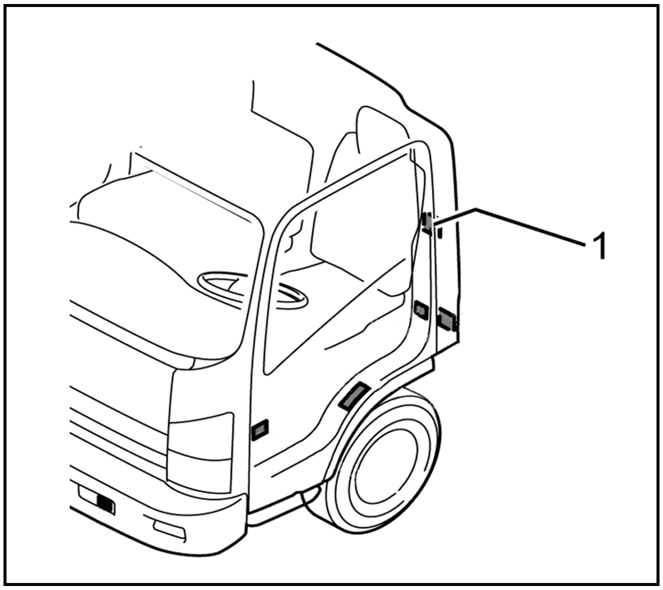
Vehicle Identification

The VIN and Weight Rating Plate lists the manufacturer, gross vehicle weight for the vehicle, maximum front end weight at ground, maximum rear end weight at ground, and the VIN (vehicle identification number). This plate is attached to the pillar above the shoulder belt hole on the driver's side.

The vehicle identification number is a legal identifier of your vehicle. It not only appears on the VIN plate, but also on the Vehicle Certificates of Title and Registration. The vehicle identification number specifically identifies a vehicle by code.

VIN Derivative



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The vehicle identification number (VIN) is located on a label on the driver side B-pillar (1).

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Country of Origin	J	Japan (JAL)
		5	United States (54D)
2	Manufacturer	A	Isuzu Motors Ltd.
		4	Spartan Motors Chassis Inc.
3	Make	L	Incomplete Vehicle — Medium and Heavy Duty
		D	Incomplete Vehicle
4	GVWR/Brake System/Body Style	B	10,001–14,000 lbs/Hydraulic/03–Regular Cab
		C	10,001–14,000 lbs/Hydraulic/43–Crew Cab
		B	14,001–16,000 lbs/Hydraulic/03–Regular Cab
		C	14,001–16,000 lbs/Hydraulic/43–Crew Cab
5	Make/Sieres	D	GM Chevrolet 3500 / 3500HD / 4500
6	Line/Cab Type	J	Non-Tilt Cab, BBC = 110 Inches
		W	Tilt Cab, BBC = 71 Inches
7	Chassis Type	1	4x2, 2 Axles, 1 Driving

Vehicle Identification Number (VIN) System (cont'd)

Position	Definition	Character	Description
8	Engine Type	B	L96 - ENGINE GAS, 8 CYL, 6.0L, SFI, E85 MAX, IRON, GM
		C	LC8 - ENGINE LPG/CNG, 8 CYL, V8, 6.0L, SFI, GEN 1, GMNA
		7	IZ3 - ENGINE DIESEL, 4 CYL, 3.0L, 4JJ1-TC 150HP
9	Check Digit	—	0~9, X - Calculated by POMS
10	Model Year	G	2017
11	Plant Location	S	When VIN position 1 is "1" (USA): Charlotte, Michigan
		7	Fujisawa, Japan
12	Model Combination	F	3500HD/4JJ1 Diesel/13,000 lbs
		8	3500 and 4500/Gas
13–17	Sequence Number	—	Positions 13 through 17 represent the number sequentially assigned by the manufacturer in the production process.

3.0L Engine ID and VIN Derivative Location

Refer to *Engine Identification on page 1-6*.

A460 Transmission ID and VIN Derivative Location

Refer to Transmission Identification Information.

GVWR (Gross Vehicle Weight Rating)

The GVWR is the weight of a vehicle plus the weight of a vehicle’s load. For the gross vehicle weight rating and the gross vehicle combined weight rating, refer to Model Explanation. For the gross vehicle weight rating range refer to the VIN Chart.

RPO Code List

The RPO list contains RPOs available on this model. Also, refer to the Service Parts Identification label for a list of the RPOs used on each specific vehicle.

Option Code	Option Description
062	RATIO-5.12
068	RATIO-5.37
14B	TRIM COMBINATION-CLOTH, VERY DK GRAY (B) (97)
16U	PRIMARY COLOR-EXTERIOR, WHITE (02)152D
1WT	PACKAGE-WT OPTION 1
24J	SEAT BELT COLOR-RED, DRIVER SEAT ONLY
24K	SEAT BELT COLOR-RED, DRIVER AND PASSENGER SEAT
2TA	TIRE FRONT-LT215/85R16 E 115/112 L BW ALS VAR1
2TB	TIRE FRONT-225/70R19.5F 125/123L BW HWY VAR1
2TC	TIRE FRONT-225/70R19.5 G 125/123 L BW HWY VAR1.
3TA	TIRE REAR-LT215/85R16 E 115/112 L BW ALS VAR1
3TB	TIRE REAR-225/70R19.5F 125/123L BW HWY VAR1
3TC	TIRE REAR-225/70R19.5 G 128/126 L BW HWY VAR1
41U	PRIMARY COLOR-EXTERIOR, BLACK (8555)
46U	PRIMARY COLOR-EXTERIOR, DK GREEN (02)
47U	PRIMARY COLOR-EXTERIOR, DK BLUE MET (02)
69I	INTERIOR TRIM-VERY DK PEWTER (01)
74U	PRIMARY COLOR-EXTERIOR, CARDINAL RED (02)
86U	PRIMARY COLOR-EXTERIOR, YELLOW (02)
9B9	GOVERNOR-ELECTRONIC SPEED SENSOR - 70 MPH
9C2	GOVERNOR-ELECTRONIC SPEED SENSOR - 65 MPH
9D2	GOVERNOR-ELECTRONIC SPEED SENSOR - 58 MPH
9E2	GOVERNOR-ELECTRONIC SPEED SENSOR - 68 MPH
9W8	COVER-SEAT PROTECTOR
A1F	SEAT-FRT BKT, HIGH BACK, DRIVER & PASS
A1G	SEAT-FRT BKT, HIGH BACK, DRIVER ONLY AIR SUSPENSION & PASS
A31	WINDOW-POWER OPERATED, ALL DOORS (DO NOT USE ON NEW/MAJOR PROGRAMS)
ATG	LOCK CONTROL, ENTRY-REMOTE ENTRY, STANDARD RANGE
AU3	LOCK CONTROL-SIDE DR, ELEC
C42	HVAC SYSTEM-HEATER, OUTSIDE AIR, DELUXE
C60	HVAC SYSTEM-AIR CONDITIONER FRT, MAN CONTROLS
C7J	GVW RATING-13,000 LBS

Option Code	Option Description
C7L	GVW RATING-12,000 LBS
C7P	GVW RATING-16,000 LBS
C7S	GVW RATING-14,500 LBS
C7X	GVW RATING-17,950 LBS
CD7	WIPER SYS WINDSHIELD-PULSE, WET ARM
CSM	PLANT CODE-CHARLOTTE, MI, USA
DB5	MIRROR O/S-LH & RH, WIDE LOAD, INTEGRAL ARM
DB6	MIRROR O/S-LH & RH, WIDE LOAD, ELEC REMOTE CONTROL, LIGHTED, HEATED, INTEGRAL ARM
DB8	MIRROR O/S-LH & RH, WIDE LOAD, HEATED, INTEGRAL ARM
E01	STEPS-ASSIST
E8C	EQUIPMENT-CAN INTERFACE CONVERTER
EB4	WHEELBASE-109 INCH
EF7	COUNTRY-UNITED STATES OF AMERICA (USA)
EL5	WHEELBASE-212 INCH
EM2	WHEELBASE-200 INCH
FHO	VEHICLE FUEL-GASOLINE E10
FHX	VEHICLE FUEL-DIESEL B20
FL5	AXLE FRONT-6,830 LB (3,098 KG)
FL6	AXLE FRONT-7,275 LB (3,299 KG)
FL9	SUSPENSION FRONT-6,830 LB (3,098 KG), TAPERED LEAF
FM2	SUSPENSION FRONT-8,440 LB, 3,828 KG) TAPERED LEAF
FNJ	WHEELBASE-132.5 INCH / 3,365 MM
FNW	WHEELBASE-176 INCH
FU3	SUSPENSION REAR-9,880 LB (4,481 KG), MULTILEAF
FU4	SUSPENSION REAR-12,900 LB (5,851 KG), MULTILEAF
FU5	SUSPENSION REAR-14,308 LB (6,490 KG), MULTILEAF
FU6	SUSPENSION REAR-14,550 LB (6,559 KG), MULTILEAF
FUJ	PLANT CODE-FUJISAWA, JAPAN
FWH	WHEELBASE-150 INCH/3,815 MM
G7M	EQUIPMENT-AIR DEFLECTOR - OVER CAB
G86	AXLE-LIMITED SLIP
HNF	INTERIOR TRIM CONFIG-CLOTH, V DK PEWTER
GZG	GVW RATING-19,500 LBS
HNF	INTERIOR TRIM CONFIG-CLOTH, V DK PEWTER
HS6	AXLE REAR-11,020 LB (4,998 KG)
HS9	AXLE REAR-14,550LB (6,599 KG)
I17	ENGINEERING YEAR-2017
I1B	ENGINE-DIESEL, 4 CYL, 5.2L, 4HK1TC 215HP

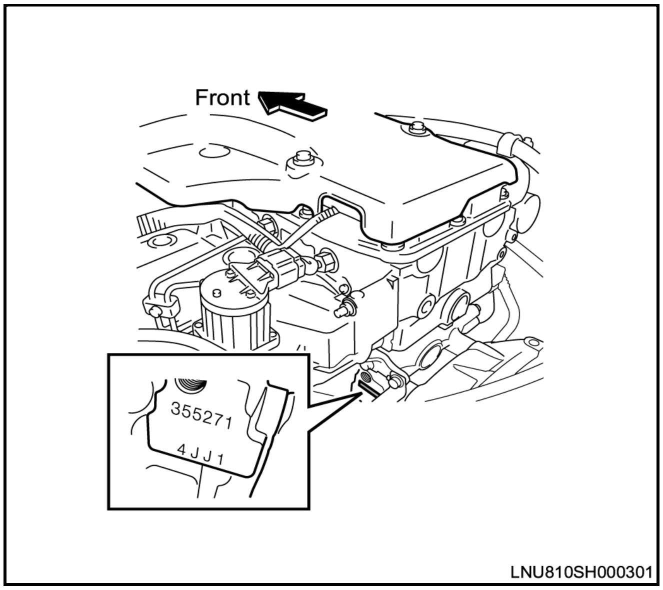
Option Code	Option Description
IR7	TRANSMISSION-AUTO 6 SPD, HMD, A465
IX0	TRANSMISSION-AUTO 6 SPD, HMD, A460
IX2	SWITCH-DOME LAMP, REAR BODY
IZ3	ENGINE-DIESEL, 4 CYL, 3.0L, 4JJ1-TC 150HP
J69	BRAKE PARKING-MECHANICALLY OPERATED
JE5	BRAKE SYSTEM-PWR, ANTILOCK, FRT & RR WHL
K05	HEATER ENG-BLOCK
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
K40	ENGINE BRAKE-EXHAUST
K45	AIR CLEANER-HEAVY DUTY
K63	GENERATOR-110 AMP
KG3	GENERATOR-145 AMP
KG9	GENERATOR-140 AMP
KPG	CAP-DEF FILL, LOCKING
KPJ	ENGINE SHUTDOWN-AUTOMATIC
KPK	HEATER-OIL PAN
KQJ	ENGINE SHUTDOWN-AUTOMATIC, 3 MINUTE TIMER
KQN	ENGINE SHUTDOWN-AUTOMATIC, 5 MINUTE TIMER
KQS	CAP-DEF FILL, LOCKING, KEYED ALIKE
L96	ENGINE-GAS, 8 CYL, 6.0L, SFI, E85 MAX, IRON, GM
LC8	ENGINE-LPG/CNG, 8 CYL, V8, 6.0L, SFI, GEN 1, GMNA
MAH	MARKETING AREA-US, PUERTO RICO/USVI
MTE	PROVISIONS-FIRE EXTINGUISHER / SAFETY REFLECTOR KIT MOUNTING
MYD	TRANSMISSION-AUTO 6 SPD, HMD, 6L90
N33	STEERING COLUMN-TILT TYPE
N3R	STEERING WHEEL-URETHANE
N4C	CERTIFICATION-EMISSION, USA 50 STATE
N4E	EMISSION SYSTEM-USA, 50 STATE
NB5	EXHAUST SYSTEM-SINGLE
NC2	EXHAUST SYSTEM-SINGLE HORIZONTAL
NH2	FUEL TANK-113L, 30 GAL
NL7	FUEL TANK-FRONT, 25 GAL
NLX	TANK-FUEL, LH MOUNT, 33 GAL ADDITIONAL
NPV	EXHAUST SYSTEM-SINGLE VERTICAL MUFF & TAILPIPE CAB MOUNTED
PTO	ENGINE CONTROL-POWER TAKE OFF (PTO) CONTROLS
PTX	ENGINE CONTROL-POWER TAKE-OFF (PTO), CONTROLS - NONE
PWJ	WHEEL-16 X 6.0, K, STEEL, DESIGN 1
PWK	WHEEL-19.5 X 6.0, K STEEL, DESIGN 1
RQ2	VEHICLE APPLICATION-TRUCK SERVICE

Option Code	Option Description
RWL	CHASSIS DRIVE LINE-REAR WHEEL DRIVE (RWD)
TP6	BATTERY-750 CCA, 12V, (SINGLE)
TP7	BATTERY-750 CCA, 12V, (DUAL)
UAD	SPEAKER SYSTEM-2, FRONT, BASE
UDH	DISPLAY INSTRUMENT-DRIVER INFO (ONE COLOR GRAPHIC)
UIY	RADIO-AM STEREO/FM STEREO, CD, AUX INPUT, USB PORT
UIZ	RADIO-AM STEREO/FM STEREO, CD, AUX INPUT, USB PORT, BLUETOOTH
UL5	RADIO-(NONE)
UZF	ALARM B/U-ELECTRICAL
V22	GRILLE-RADIATOR, CHROME
V8D	VEHICLE STATEMENT-US
VT7	OWNERS MANUAL-ENGLISH LANGUAGE
VXT	VEHICLE TYPE-INCOMPLETE
WMH	VIN MODEL YEAR-2017
X88	MARKET BRAND-CHEVROLET
XWL	MIRROR PROVISIONS-102" MIRROR BRACKET
ZY1	COLOR COMBINATION-SOLID

Engine Identification

4JJ1 Engine

The engine number is stamped on the left-side rear part of the engine block.



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Section 2

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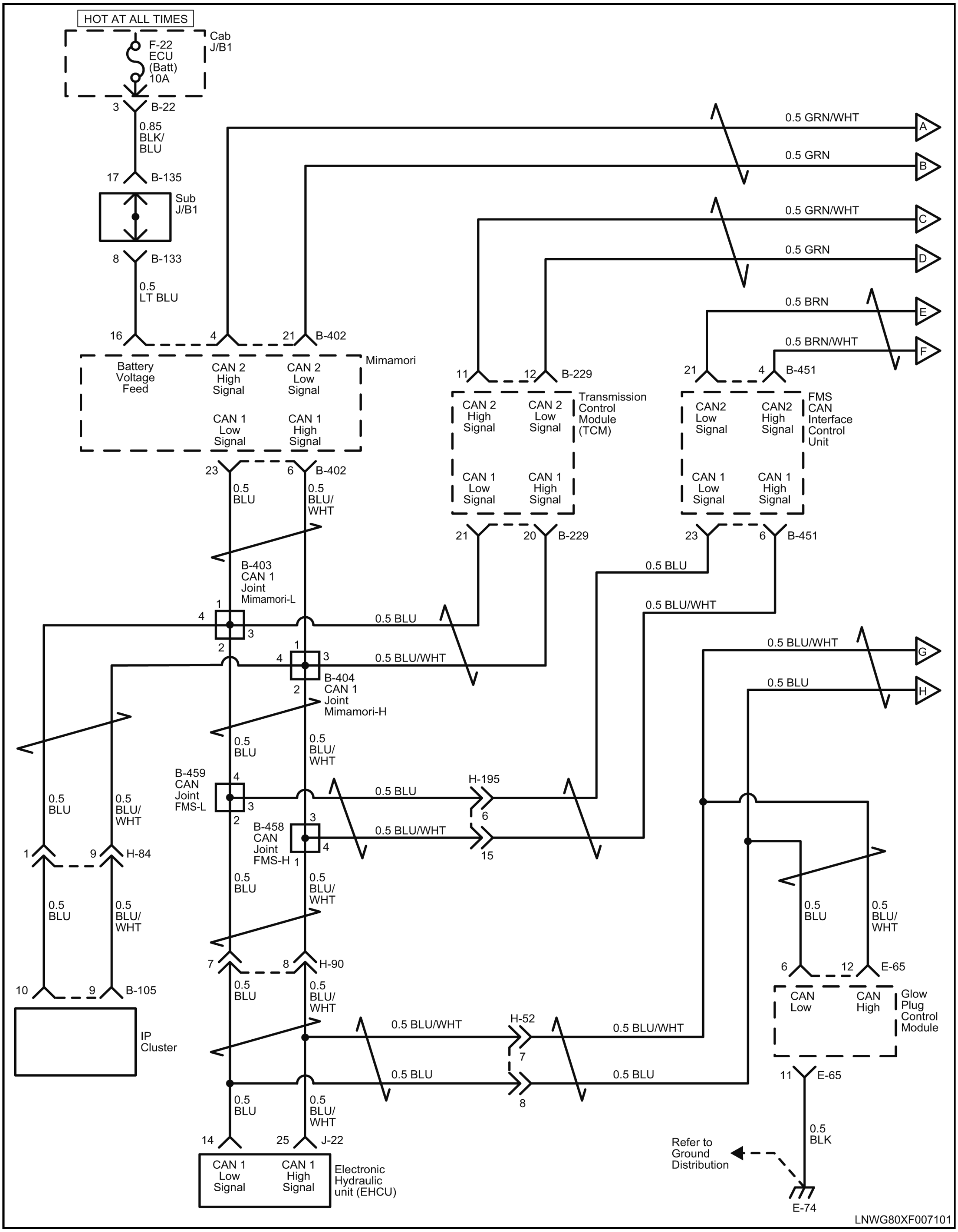
Cab and Chassis Electrical

Schematic and Routing Diagrams

Controller Area Network (CAN) Schematics


HOT AT ALL TIMES
F-22
ECU
(Batt)
10A
Cab
J/B1
3
B-22
0.85
BLK/
BLU
17
B-135
Sub
J/B1
8
B-133
0.5
LT BLU
16
4
21
B-402
Mimamori
Battery
Voltage
Feed
CAN 2
High
Signal
CAN 2
Low
Signal
CAN 1
Low
Signal
CAN 1
High
Signal
23
6
B-402
0.5
BLU
0.5
BLU/
WHT
0.5 GRN/WHT
A
0.5 GRN
B
0.5 GRN/WHT
C
0.5 GRN
D
0.5 BRN
E
0.5 BRN/WHT
F
11
12
B-229
Transmission
Control
Module
(TCM)
CAN 2
High
Signal
CAN 2
Low
Signal
CAN 1
Low
Signal
CAN 1
High
Signal
21
20
B-229
21
4
B-451
FMS
CAN
Interface
Control
Unit
CAN2
Low
Signal
CAN2
High
Signal
CAN 1
Low
Signal
CAN 1
High
Signal
23
6
B-451
0.5 BLU
0.5 BLU/WHT
B-403
CAN 1
Joint
Mimamori-L
1
4
3
2
0.5 BLU
1
4
3
0.5 BLU/WHT
B-404
CAN 1
Joint
Mimamori-H
2
0.5 BLU/WHT
G
0.5 BLU
H
0.5
BLU
0.5
BLU/
WHT
B-459
CAN
Joint
FMS-L
4
3
2
0.5 BLU
H-195
6
B-458
CAN
Joint
FMS-H
3
4
1
0.5 BLU/WHT
15
0.5
BLU
0.5
BLU/
WHT
1
9
H-84
0.5
BLU
0.5
BLU/
WHT
0.5
BLU
0.5
BLU/
WHT
0.5
BLU
0.5
BLU/
WHT
7
8
H-90
10
9
B-105
IP
Cluster
0.5
BLU
0.5
BLU/
WHT
6
12
E-65
CAN
Low
CAN
High
Glow
Plug
Control
Module
0.5 BLU/WHT
H-52
0.5 BLU/WHT
7
0.5 BLU
0.5 BLU
8
11
E-65
0.5
BLK
Refer to
Ground
Distribution
E-74
0.5
BLU
0.5
BLU/
WHT
14
25
J-22
CAN 1
Low
Signal
CAN 1
High
Signal
Electronic
Hydraulic
unit (EHCU)
LNWG80XF007101

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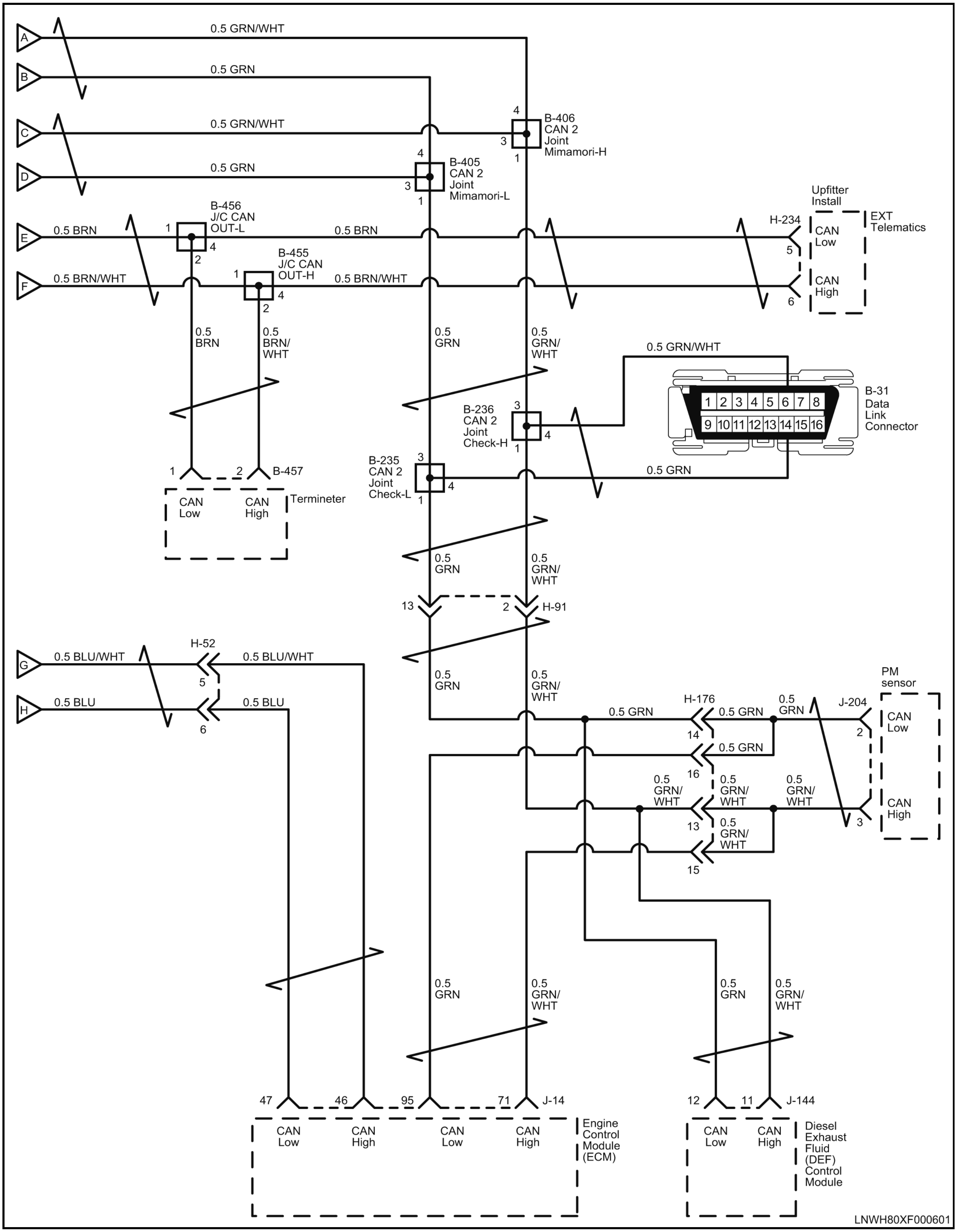
A
B
C
D
E
F
G
H
0.5 GRN/WHT
0.5 GRN
0.5 GRN/WHT
0.5 GRN
4
3
1
B-406
CAN 2
Joint
Mimamori-H
4
3
1
B-405
CAN 2
Joint
Mimamori-L
B-456
J/C CAN
OUT-L
1
4
2
0.5 BRN
0.5 BRN
B-455
J/C CAN
OUT-H
1
4
2
0.5 BRN/WHT
0.5 BRN/WHT
Upfitter
Install
H-234
CAN
Low
5
CAN
High
6
EXT
Telematics
0.5
BRN
0.5
BRN/
WHT
0.5
GRN
0.5
GRN/
WHT
0.5 GRN/WHT
B-31
Data
Link
Connector
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
B-236
CAN 2
Joint
Check-H
3
4
1
B-235
CAN 2
Joint
Check-L
3
4
1
0.5 GRN
1
2
B-457
CAN
Low
CAN
High
Termineter
0.5
GRN
0.5
GRN/
WHT
13
2
H-91
H-52
0.5 BLU/WHT
0.5 BLU/WHT
5
0.5 BLU
0.5 BLU
6
0.5
GRN
0.5
GRN/
WHT
PM
sensor
0.5 GRN
H-176
0.5 GRN
0.5
GRN
J-204
CAN
Low
2
14
0.5 GRN
16
0.5
GRN/
WHT
0.5
GRN/
WHT
0.5
GRN/
WHT
CAN
High
3
13
0.5
GRN/
WHT
15
0.5
GRN
0.5
GRN/
WHT
0.5
GRN
0.5
GRN/
WHT
47
46
95
71
J-14
CAN
Low
CAN
High
CAN
Low
CAN
High
Engine
Control
Module
(ECM)
12
11
J-144
CAN
Low
CAN
High
Diesel
Exhaust
Fluid
(DEF)
Control
Module
LNWH80XF000601

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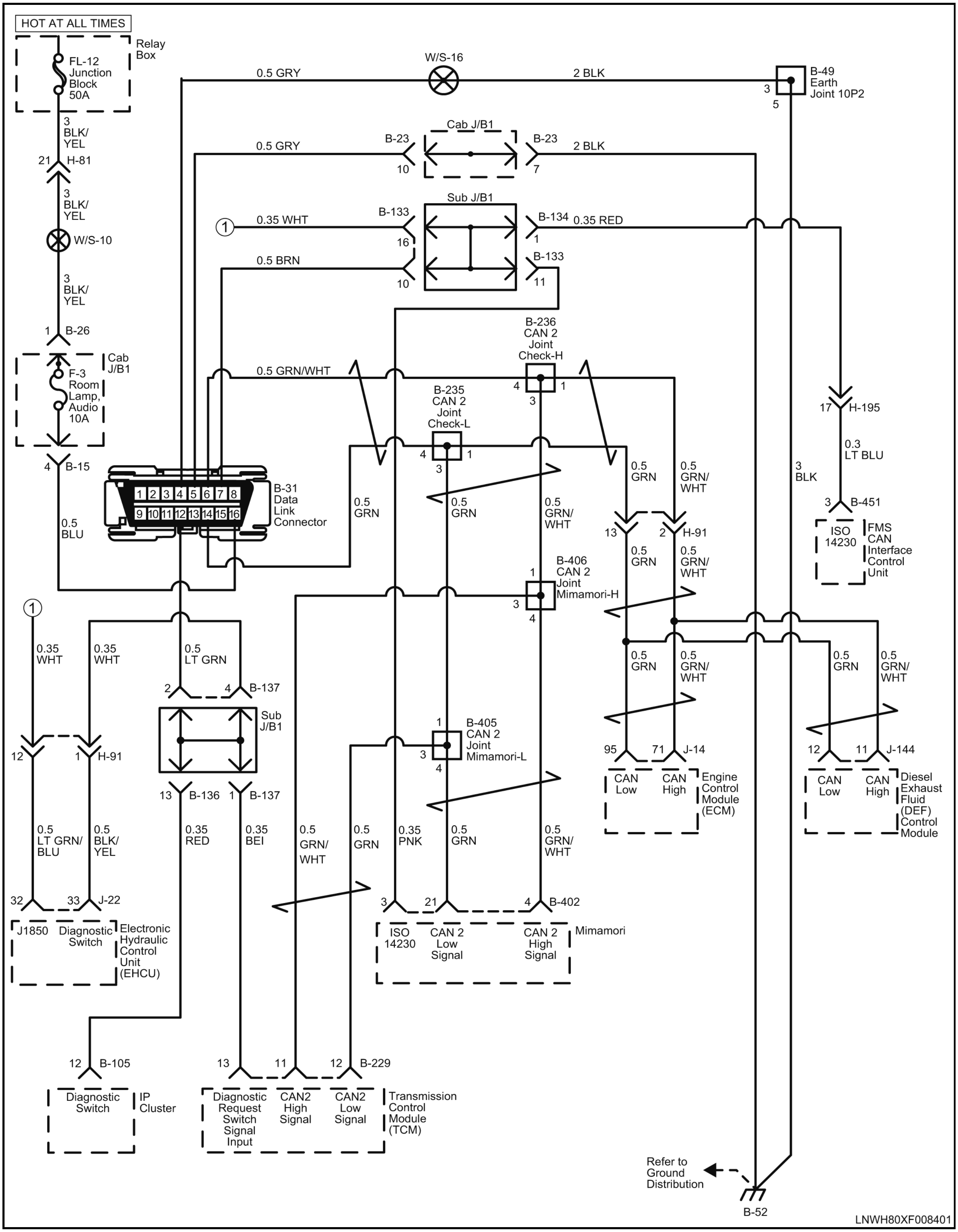
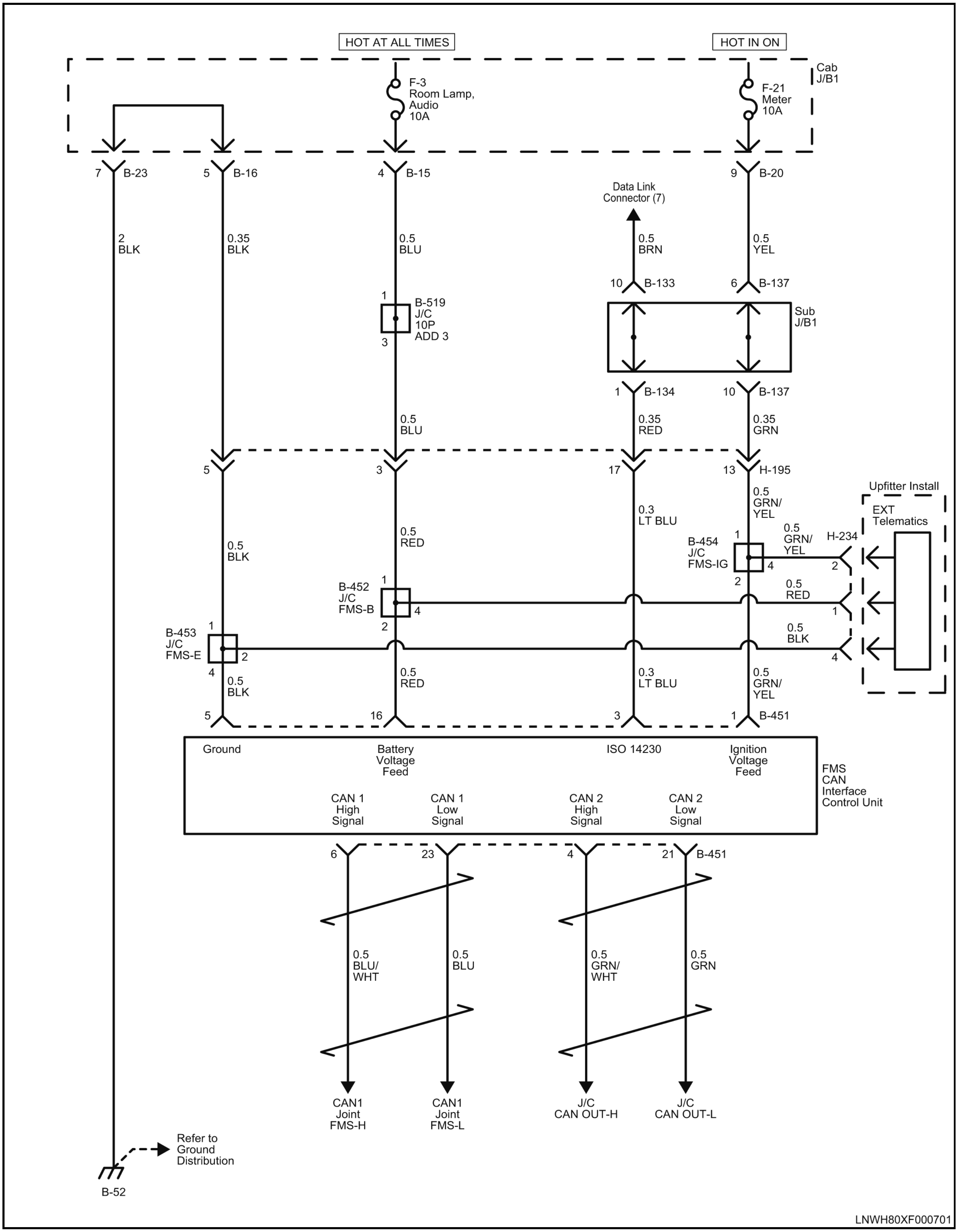
Data Link Connector Schematics


HOT AT ALL TIMES
Relay Box
FL-12 Junction Block 50A
3 BLK/ YEL
21 H-81
3 BLK/ YEL
W/S-10
3 BLK/ YEL
1 B-26
Cab J/B1
F-3 Room Lamp, Audio 10A
4 B-15
0.5 BLU
0.5 GRY
W/S-16
2 BLK
B-49 Earth Joint 10P2
3
5
Cab J/B1
B-23
0.5 GRY
10
B-23
2 BLK
7
Sub J/B1
B-133
0.35 WHT
16
B-134 0.35 RED
1
0.5 BRN
10
B-133
11
B-236 CAN 2 Joint Check-H
4
1
3
0.5 GRN/WHT
B-235 CAN 2 Joint Check-L
4
1
3
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
B-31 Data Link Connector
0.5 GRN
0.5 GRN
0.5 GRN/ WHT
0.5 GRN
0.5 GRN/ WHT
13
2 H-91
0.5 GRN
0.5 GRN/ WHT
17 H-195
0.3 LT BLU
3 BLK
3 B-451
ISO 14230
FMS CAN Interface Control Unit
B-406 CAN 2 Joint Mimamori-H
1
3
4
0.35 WHT
0.35 WHT
0.5 LT GRN
2
4 B-137
Sub J/B1
12
1 H-91
13 B-136
1 B-137
0.5 GRN
0.5 GRN/ WHT
0.5 GRN
0.5 GRN/ WHT
B-405 CAN 2 Joint Mimamori-L
1
3
4
95
71 J-14
CAN Low
CAN High
Engine Control Module (ECM)
12
11 J-144
CAN Low
CAN High
Diesel Exhaust Fluid (DEF) Control Module
0.5 LT GRN/ BLU
0.5 BLK/ YEL
0.35 RED
0.35 BEI
0.5 GRN/ WHT
0.5 GRN
0.35 PNK
0.5 GRN
0.5 GRN/ WHT
32
33 J-22
J1850
Diagnostic Switch
Electronic Hydraulic Control Unit (EHCU)
3
21
4 B-402
ISO 14230
CAN 2 Low Signal
CAN 2 High Signal
Mimamori
12 B-105
Diagnostic Switch
IP Cluster
13
11
12 B-229
Diagnostic Request Switch Signal Input
CAN2 High Signal
CAN2 Low Signal
Transmission Control Module (TCM)
Refer to Ground Distribution
B-52
LNWH80XF008401

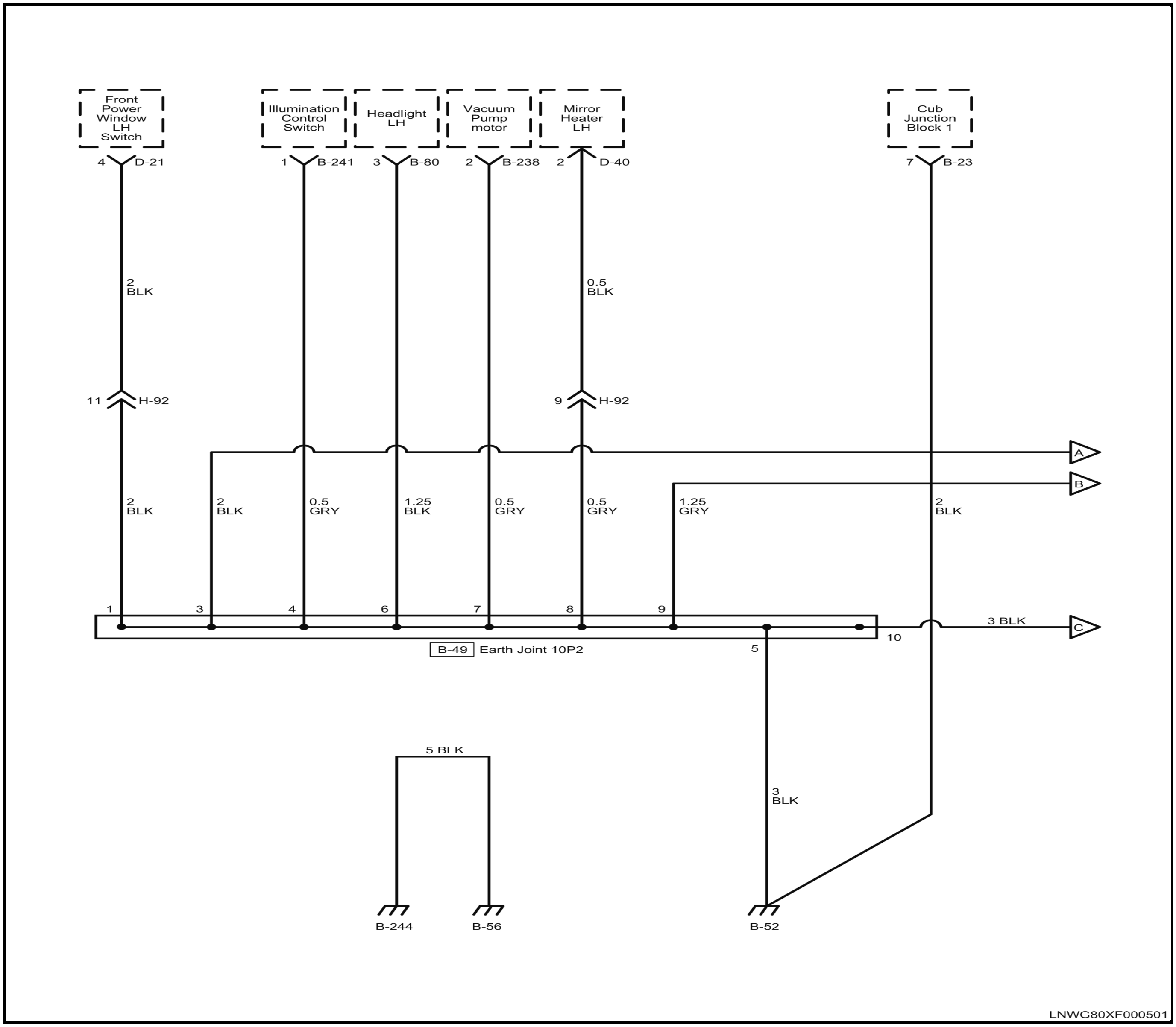
4645739

FMS CAN Interface Schematics

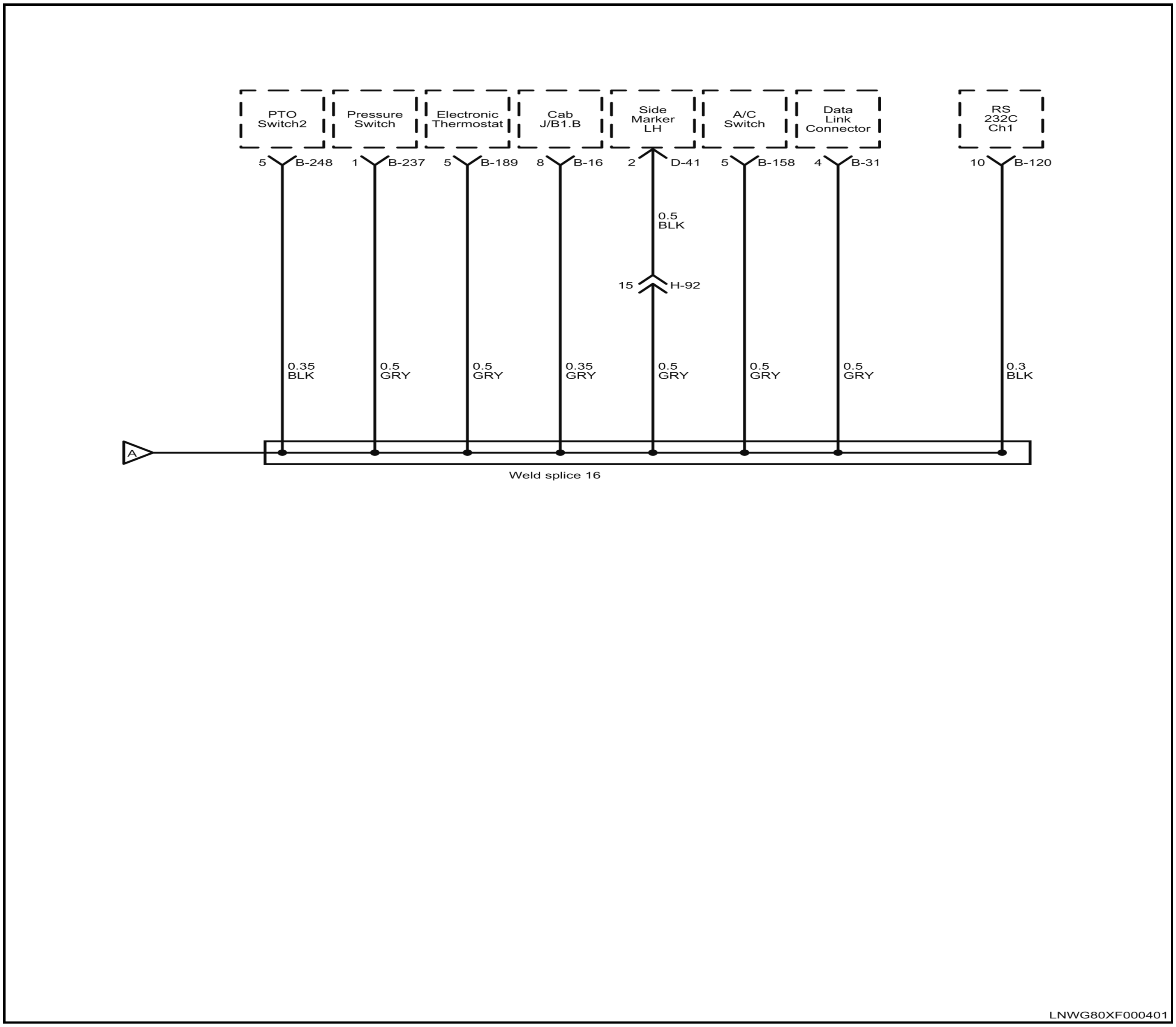

HOT AT ALL TIMES
HOT IN ON
Cab J/B1
F-3 Room Lamp, Audio 10A
F-21 Meter 10A
7 B-23
5 B-16
4 B-15
9 B-20
Data Link Connector (7)
2 BLK
0.35 BLK
0.5 BLU
0.5 BRN
0.5 YEL
10 B-133
6 B-137
1
B-519 J/C 10P ADD 3
3
Sub J/B1
1 B-134
10 B-137
0.5 BLU
0.35 RED
0.35 GRN
5
3
17
13 H-195
0.5 GRN/ YEL
Upfitter Install
EXT Telematics
0.3 LT BLU
0.5 RED
0.5 BLK
B-454 J/C FMS-IG
1
0.5 GRN/ YEL
H-234
4
2
2
1
B-452 J/C FMS-B
4
2
0.5 RED
1
B-453 J/C FMS-E
1
2
4
0.5 BLK
4
0.5 BLK
0.5 RED
0.3 LT BLU
0.5 GRN/ YEL
5
16
3
1 B-451
Ground
Battery Voltage Feed
ISO 14230
Ignition Voltage Feed
FMS CAN Interface Control Unit
CAN 1 High Signal
CAN 1 Low Signal
CAN 2 High Signal
CAN 2 Low Signal
6
23
4
21 B-451
0.5 BLU/ WHT
0.5 BLU
0.5 GRN/ WHT
0.5 GRN
CAN1 Joint FMS-H
CAN1 Joint FMS-L
J/C CAN OUT-H
J/C CAN OUT-L
Refer to Ground Distribution
B-52
LNWH80XF000701

4645758

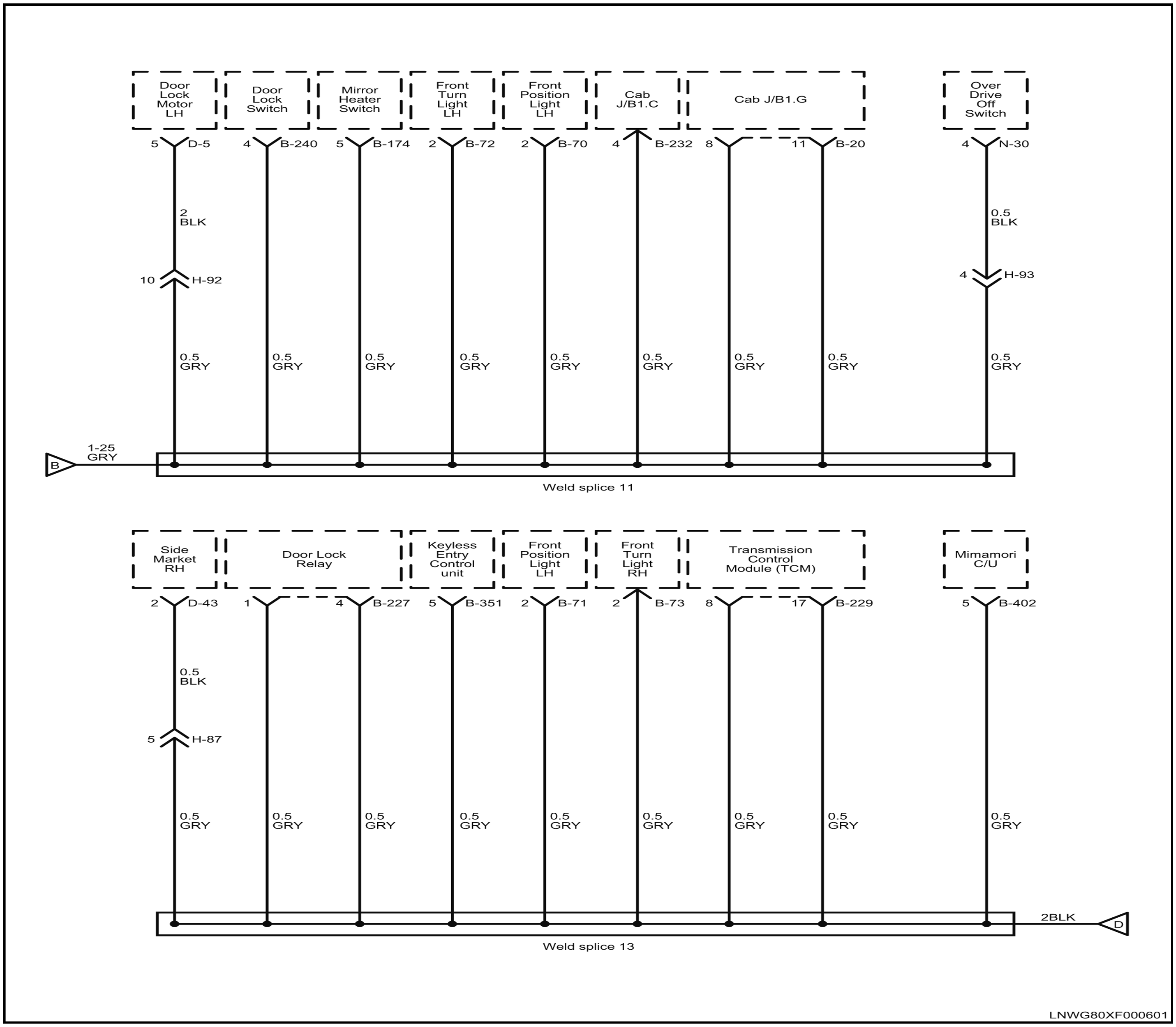
Ground Distribution Schematics


Front Power Window LH Switch
Illumination Control Switch
Headlight LH
Vacuum Pump motor
Mirror Heater LH
Cub Junction Block 1
4 D-21
1 B-241
3 B-80
2 B-238
2 D-40
7 B-23
2 BLK
0.5 BLK
11 H-92
9 H-92
A
B
2 BLK
2 BLK
0.5 GRY
1.25 BLK
0.5 GRY
0.5 GRY
1.25 GRY
2 BLK
1
3
4
6
7
8
9
10
3 BLK
C
B-49 Earth Joint 10P2
5
5 BLK
3 BLK
B-244
B-56
B-52
LNWG80XF000501

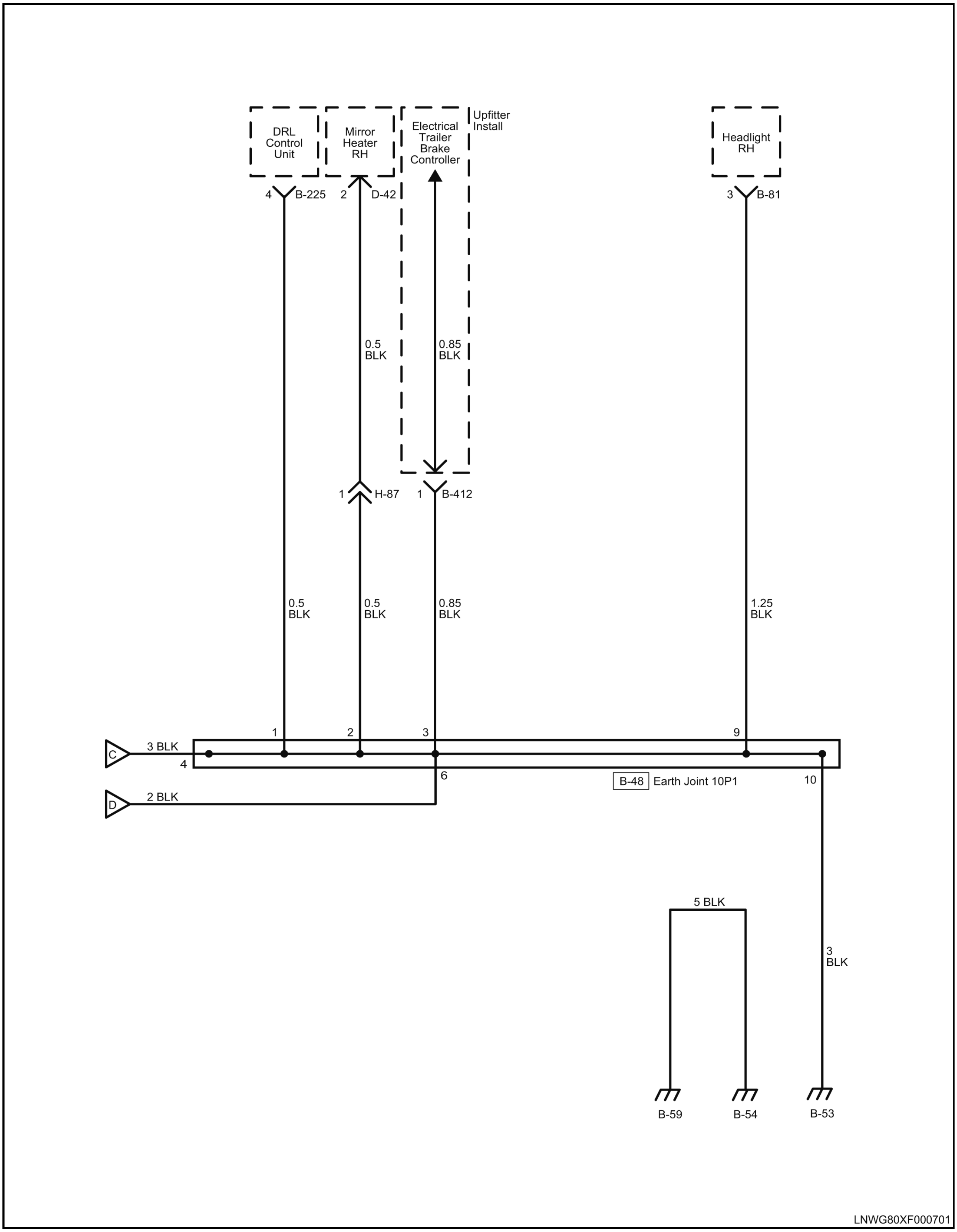
4496044


PTO Switch2
Pressure Switch
Electronic Thermostat
Cab J/B1.B
Side Marker LH
A/C Switch
Data Link Connector
RS 232C Ch1
5 B-248
1 B-237
5 B-189
8 B-16
2 D-41
5 B-158
4 B-31
10 B-120
0.5 BLK
15 H-92
0.35 BLK
0.5 GRY
0.5 GRY
0.35 GRY
0.5 GRY
0.5 GRY
0.5 GRY
0.3 BLK
A
Weld splice 16
LNWG80XF000401

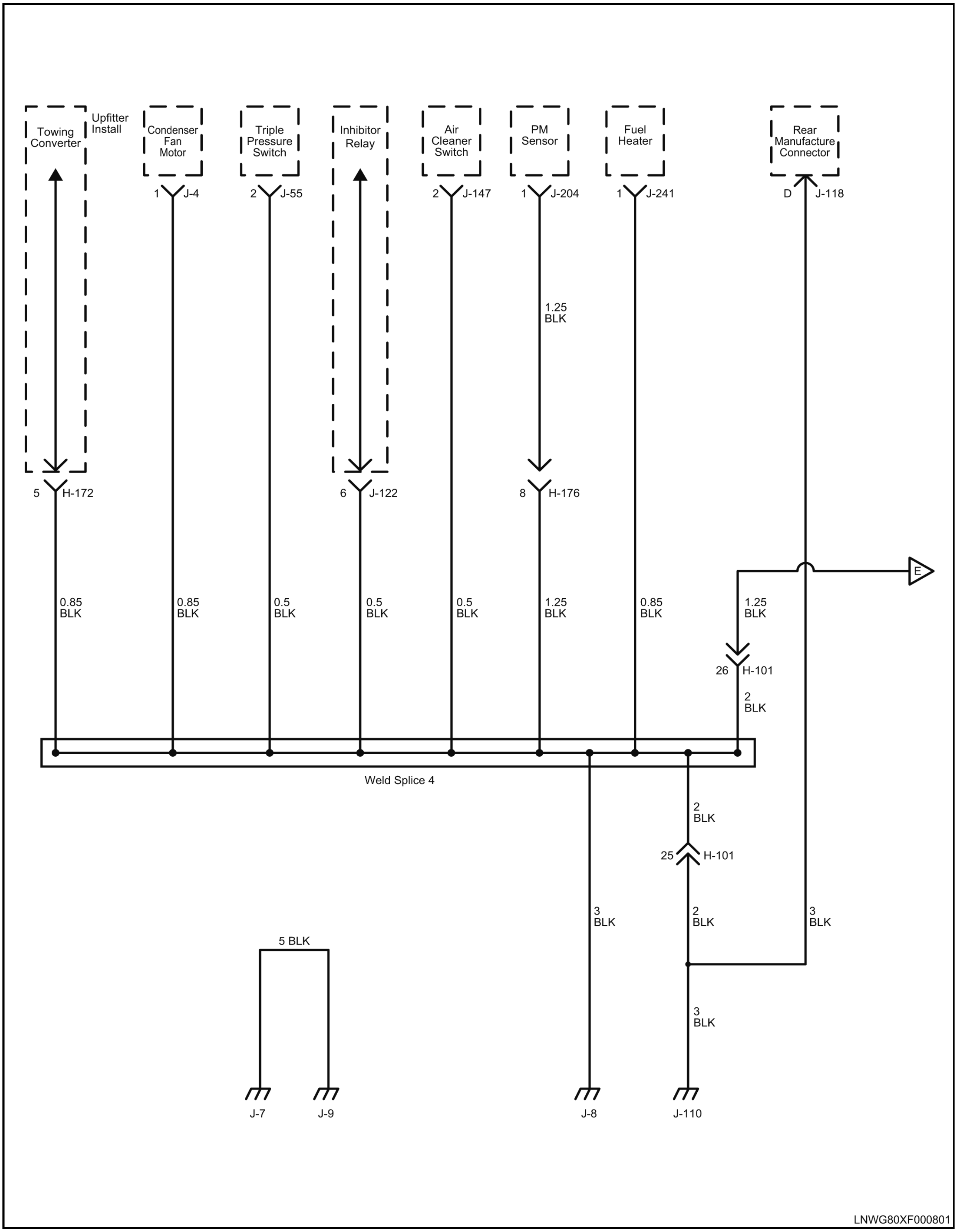
4496048


Door Lock Motor LH
Door Lock Switch
Mirror Heater Switch
Front Turn Light LH
Front Position Light LH
Cab J/B1.C
Cab J/B1.G
Over Drive Off Switch
5 D-5
4 B-240
5 B-174
2 B-72
2 B-70
4 B-232
8
11 B-20
4 N-30
2 BLK
10 H-92
0.5 BLK
4 H-93
0.5 GRY
1-25 GRY
B
Weld splice 11
Side Market RH
Door Lock Relay
Keyless Entry Control unit
Front Position Light LH
Front Turn Light RH
Transmission Control Module (TCM)
Mimamori C/U
2 D-43
1
4 B-227
5 B-351
2 B-71
2 B-73
8
17 B-229
5 B-402
0.5 BLK
5 H-87
0.5 GRY
2BLK
D
Weld splice 13
LNWG80XF000601

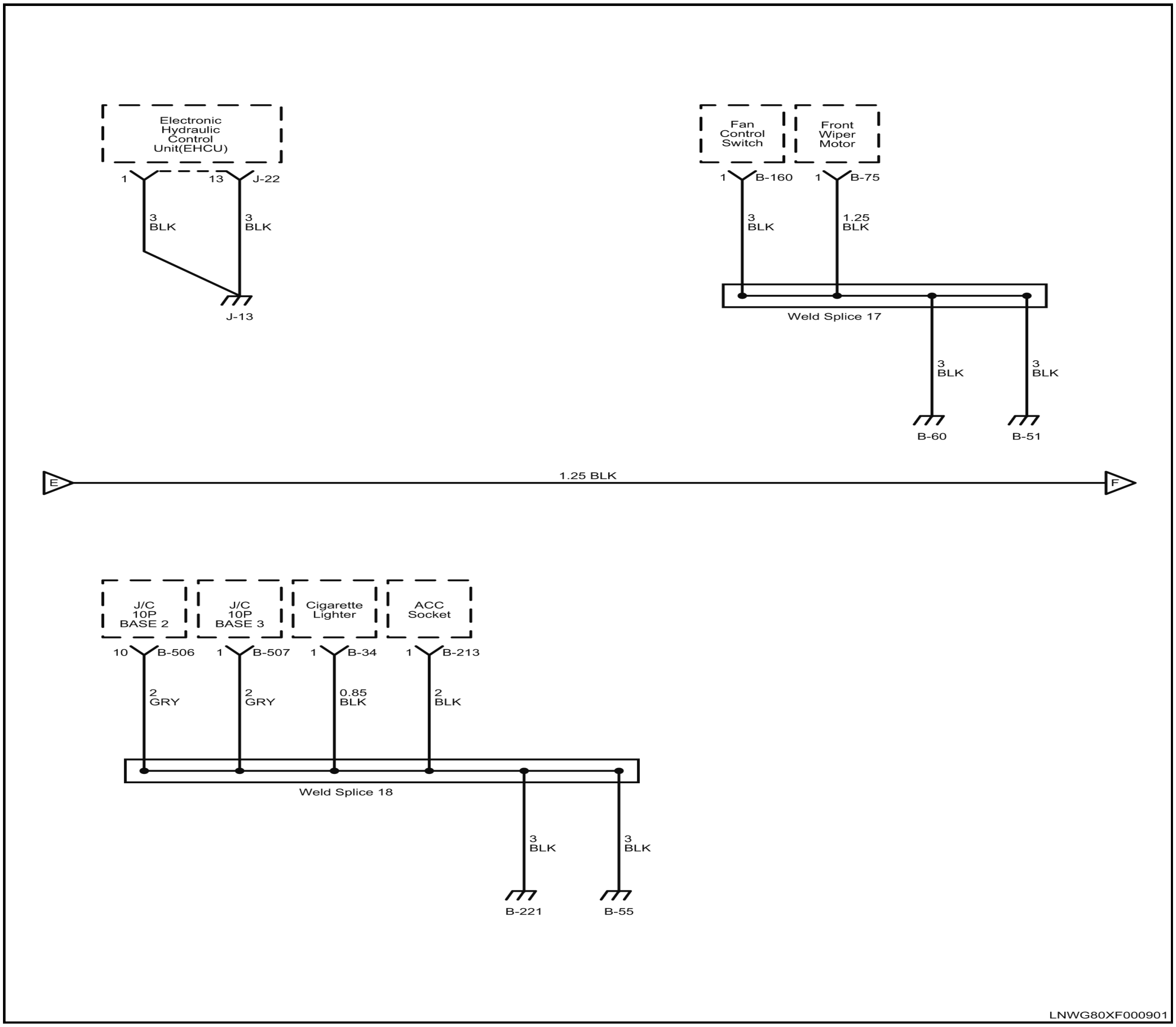
4496052


DRL Control Unit
Mirror Heater RH
Electrical Trailer Brake Controller
Upfitter Install
Headlight RH
4 B-225
2 D-42
3 B-81
0.5 BLK
0.85 BLK
1 H-87
1 B-412
0.5 BLK
0.5 BLK
0.85 BLK
1.25 BLK
1
2
3
9
C
3 BLK
4
6
D
2 BLK
B-48 Earth Joint 10P1
10
5 BLK
3 BLK
B-59
B-54
B-53
LNWG80XF000701

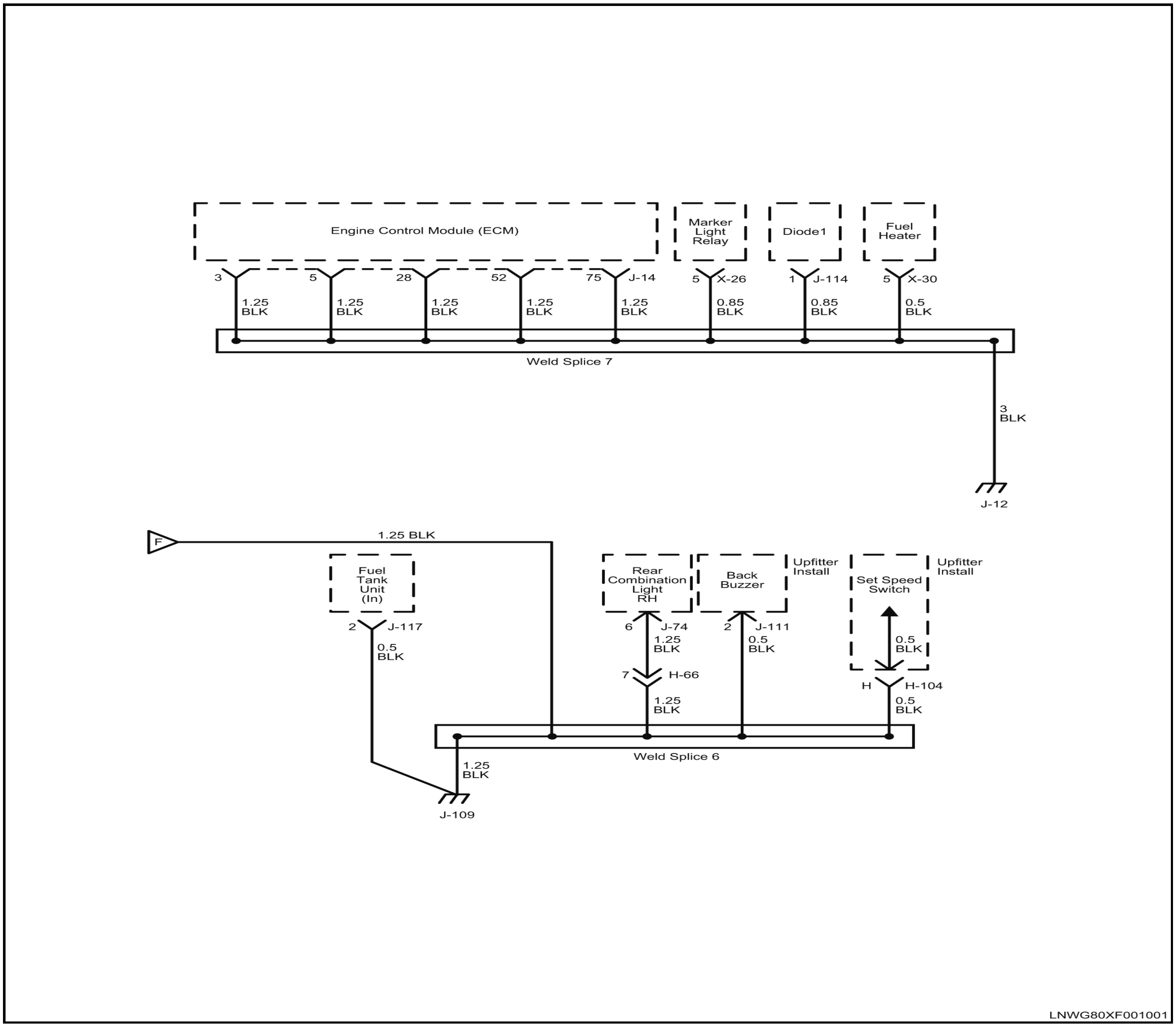
4496057


Towing Converter
Upfitter Install
Condenser Fan Motor
Triple Pressure Switch
Inhibitor Relay
Air Cleaner Switch
PM Sensor
Fuel Heater
Rear Manufacture Connector
1 J-4
2 J-55
2 J-147
1 J-204
1 J-241
D J-118
1.25 BLK
5 H-172
6 J-122
8 H-176
E
0.85 BLK
0.85 BLK
0.5 BLK
0.5 BLK
0.5 BLK
1.25 BLK
0.85 BLK
1.25 BLK
26 H-101
2 BLK
Weld Splice 4
2 BLK
25 H-101
3 BLK
2 BLK
3 BLK
5 BLK
3 BLK
J-7
J-9
J-8
J-110
LNWG80XF000801

4496063

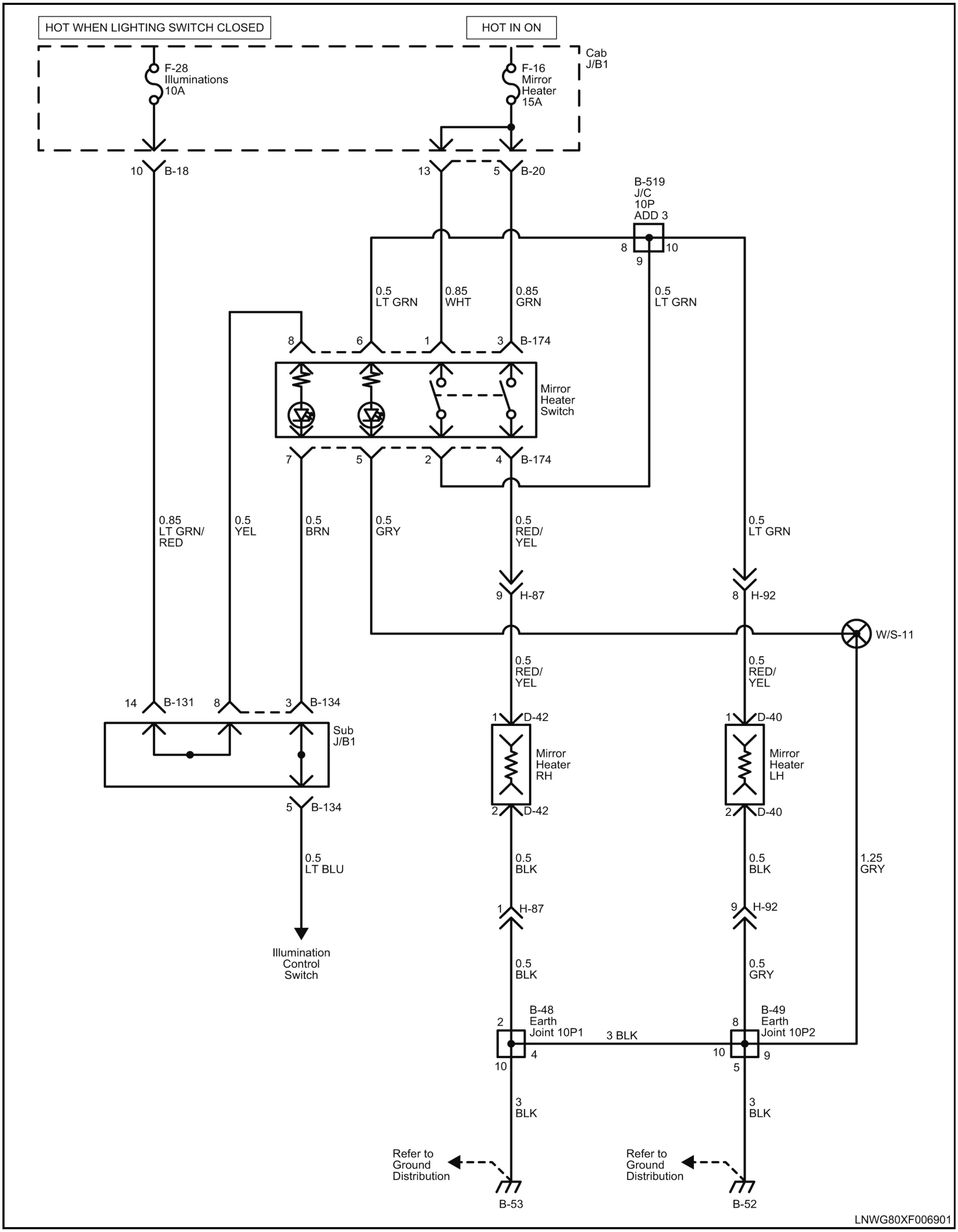

Electronic Hydraulic Control Unit(EHCU)
1
13
J-22
3 BLK
3 BLK
J-13
Fan Control Switch
Front Wiper Motor
1
B-160
1
B-75
3 BLK
1.25 BLK
Weld Splice 17
3 BLK
3 BLK
B-60
B-51
E
1.25 BLK
F
J/C 10P BASE 2
J/C 10P BASE 3
Cigarette Lighter
ACC Socket
10
B-506
1
B-507
1
B-34
1
B-213
2 GRY
2 GRY
0.85 BLK
2 BLK
Weld Splice 18
3 BLK
3 BLK
B-221
B-55
LNWG80XF000901

4496077


Engine Control Module (ECM)
Marker Light Relay
Diode1
Fuel Heater
3
5
28
52
75
J-14
5 X-26
1 J-114
5 X-30
1.25 BLK
0.85 BLK
0.5 BLK
Weld Splice 7
3 BLK
J-12
F
1.25 BLK
Fuel Tank Unit (In)
2 J-117
0.5 BLK
Rear Combination Light RH
6 J-74
1.25 BLK
7 H-66
Back Buzzer
2 J-111
Upfitter Install
Set Speed Switch
H H-104
Weld Splice 6
J-109
LNWG80XF001001

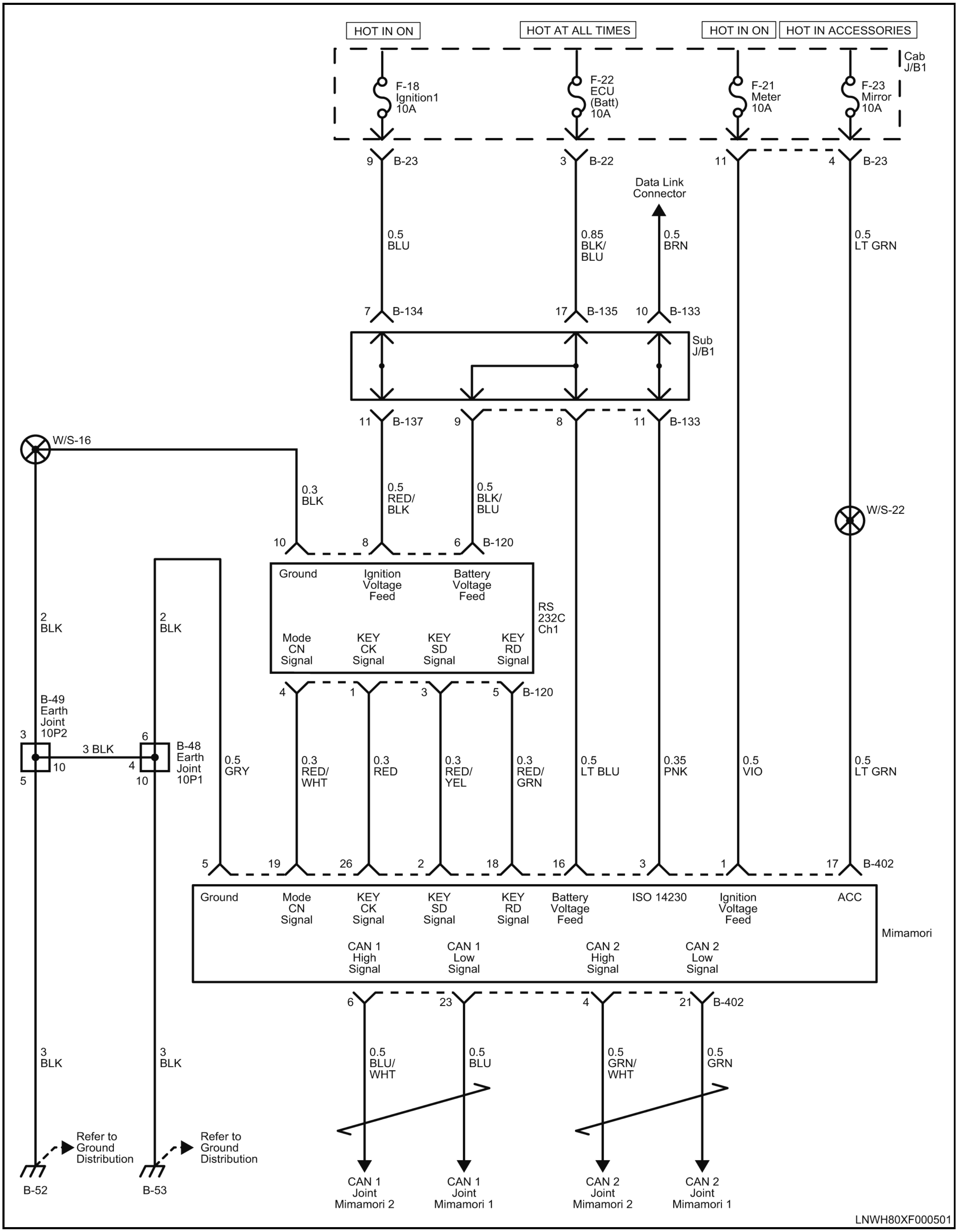
4496080

Heated Mirror Schematics


HOT WHEN LIGHTING SWITCH CLOSED
HOT IN ON
Cab J/B1
F-28 Illuminations 10A
F-16 Mirror Heater 15A
10 B-18
13
5 B-20
B-519 J/C 10P ADD 3
8
10
9
0.5 LT GRN
0.85 WHT
0.85 GRN
0.5 LT GRN
8
6
1
3 B-174
Mirror Heater Switch
7
5
2
4 B-174
0.85 LT GRN/ RED
0.5 YEL
0.5 BRN
0.5 GRY
0.5 RED/ YEL
0.5 LT GRN
9 H-87
8 H-92
W/S-11
0.5 RED/ YEL
0.5 RED/ YEL
14 B-131
8
3 B-134
Sub J/B1
5 B-134
0.5 LT BLU
Illumination Control Switch
1 D-42
Mirror Heater RH
2 D-42
1 D-40
Mirror Heater LH
2 D-40
0.5 BLK
0.5 BLK
1.25 GRY
1 H-87
9 H-92
0.5 BLK
0.5 GRY
2
B-48 Earth Joint 10P1
4
10
3 BLK
8
B-49 Earth Joint 10P2
10
9
5
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
B-53
B-52
LNWG80XF006901

4497029

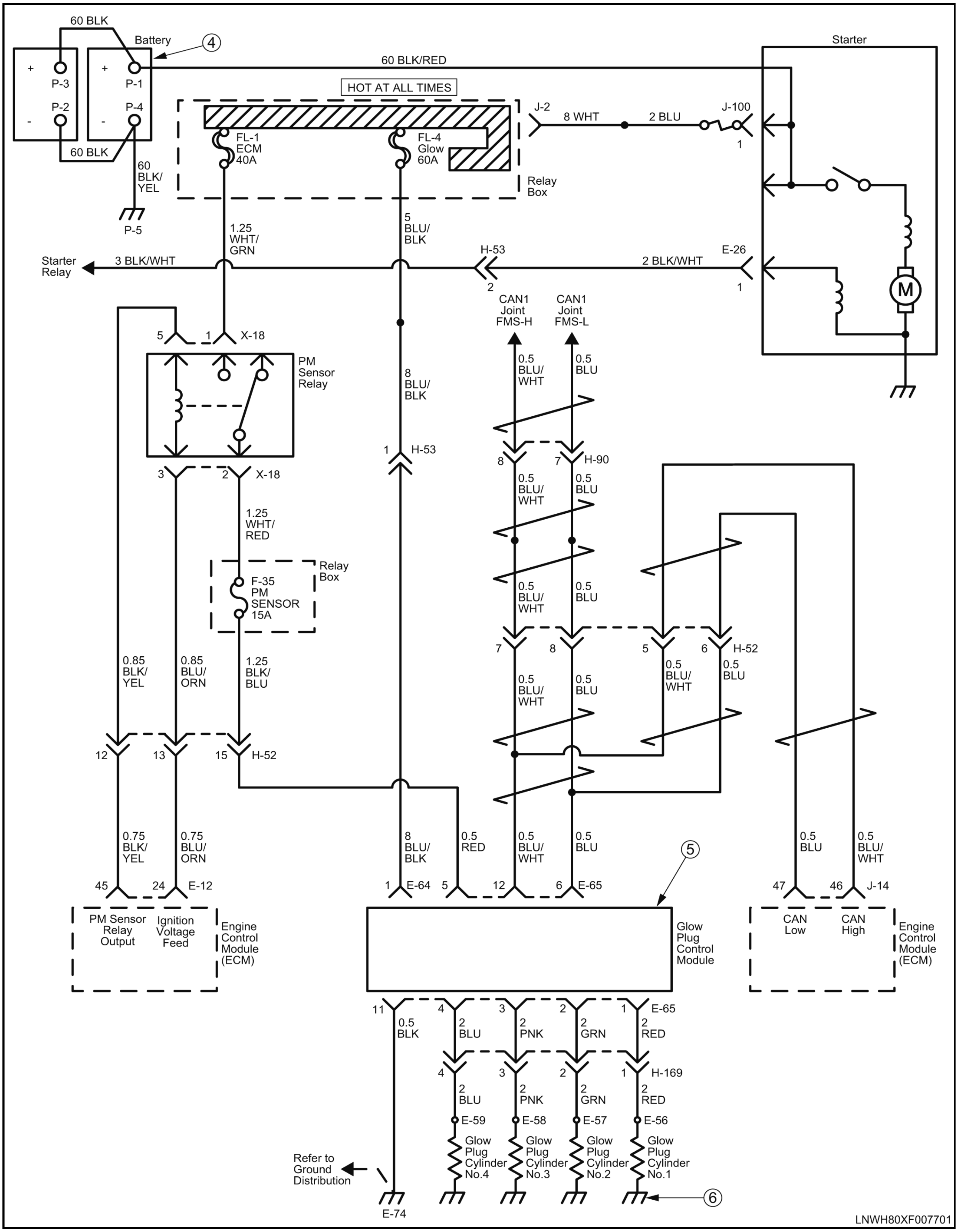
MIMAMORI Schematics


HOT IN ON
HOT AT ALL TIMES
HOT IN ON
HOT IN ACCESSORIES
Cab J/B1
F-18 Ignition1 10A
F-22 ECU (Batt) 10A
F-21 Meter 10A
F-23 Mirror 10A
9 B-23
3 B-22
11
4 B-23
Data Link Connector
0.5 BLU
0.85 BLK/ BLU
0.5 BRN
0.5 LT GRN
7 B-134
17 B-135
10 B-133
Sub J/B1
11 B-137
9
8
11 B-133
W/S-16
0.3 BLK
0.5 RED/ BLK
0.5 BLK/ BLU
W/S-22
10
8
6 B-120
Ground
Ignition Voltage Feed
Battery Voltage Feed
RS 232C Ch1
Mode CN Signal
KEY CK Signal
KEY SD Signal
KEY RD Signal
2 BLK
2 BLK
4
1
3
5 B-120
B-49 Earth Joint 10P2
3
3 BLK
6
B-48 Earth Joint 10P1
10
4
5
10
0.5 GRY
0.3 RED/ WHT
0.3 RED
0.3 RED/ YEL
0.3 RED/ GRN
0.5 LT BLU
0.35 PNK
0.5 VIO
0.5 LT GRN
5
19
26
2
18
16
3
1
17 B-402
Ground
Mode CN Signal
KEY CK Signal
KEY SD Signal
KEY RD Signal
Battery Voltage Feed
ISO 14230
Ignition Voltage Feed
ACC
Mimamori
CAN 1 High Signal
CAN 1 Low Signal
CAN 2 High Signal
CAN 2 Low Signal
6
23
4
21 B-402
3 BLK
3 BLK
0.5 BLU/ WHT
0.5 BLU
0.5 GRN/ WHT
0.5 GRN
Refer to Ground Distribution
Refer to Ground Distribution
B-52
B-53
CAN 1 Joint Mimamori 2
CAN 1 Joint Mimamori 1
CAN 2 Joint Mimamori 2
CAN 2 Joint Mimamori 1
LNWH80XF000501

4645732

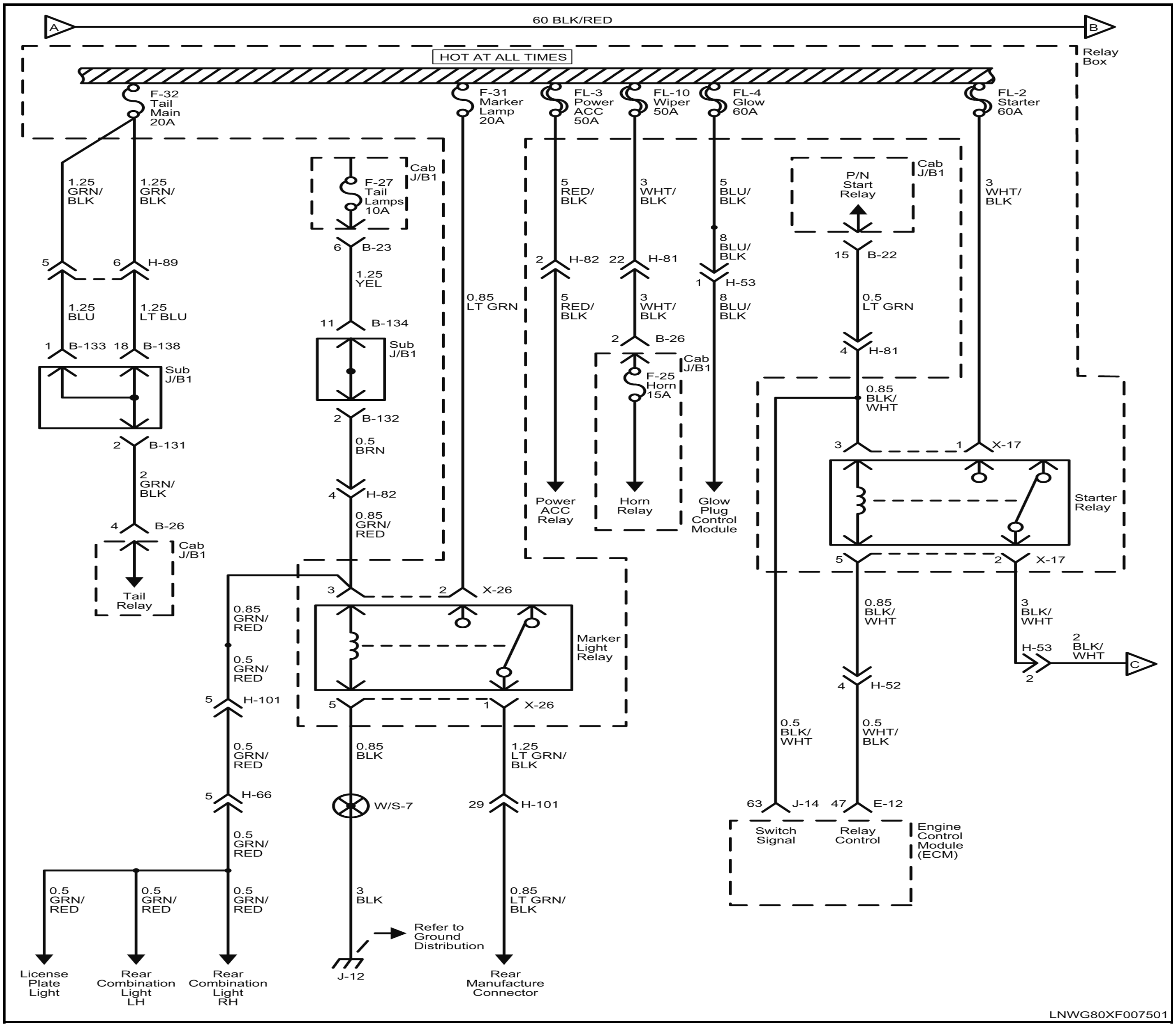
Power Distribution Schematics

Circuit Diagram (CHASSIS) (1 of 7)


60 BLK
Battery
④
+
P-3
+
P-1
P-2
-
P-4
-
60 BLK
60 BLK/YEL
P-5
60 BLK/RED
HOT AT ALL TIMES
FL-1 ECM 40A
FL-4 Glow 60A
Relay Box
J-2
8 WHT
2 BLU
J-100
1
Starter
M
1.25 WHT/GRN
5 BLU/BLK
Starter Relay
3 BLK/WHT
H-53
2
2 BLK/WHT
E-26
1
CAN1 Joint FMS-H
CAN1 Joint FMS-L
5
1
X-18
PM Sensor Relay
8 BLU/BLK
0.5 BLU/WHT
0.5 BLU
1
H-53
8
7
H-90
3
2
X-18
0.5 BLU/WHT
0.5 BLU
1.25 WHT/RED
Relay Box
F-35 PM SENSOR 15A
0.5 BLU/WHT
0.5 BLU
7
8
5
6
H-52
0.85 BLK/YEL
0.85 BLU/ORN
1.25 BLK/BLU
0.5 BLU/WHT
0.5 BLU
0.5 BLU/WHT
0.5 BLU
12
13
15
H-52
0.75 BLK/YEL
0.75 BLU/ORN
8 BLU/BLK
0.5 RED
0.5 BLU/WHT
0.5 BLU
0.5 BLU
0.5 BLU/WHT
⑤
45
24
E-12
1
E-64
5
12
6
E-65
47
46
J-14
PM Sensor Relay Output
Ignition Voltage Feed
Engine Control Module (ECM)
Glow Plug Control Module
CAN Low
CAN High
Engine Control Module (ECM)
11
4
3
2
1
E-65
0.5 BLK
2 BLU
2 PNK
2 GRN
2 RED
4
3
2
1
H-169
2 BLU
2 PNK
2 GRN
2 RED
E-59
E-58
E-57
E-56
Glow Plug Cylinder No.4
Glow Plug Cylinder No.3
Glow Plug Cylinder No.2
Glow Plug Cylinder No.1
Refer to Ground Distribution
E-74
⑥
LNWH80XF007701

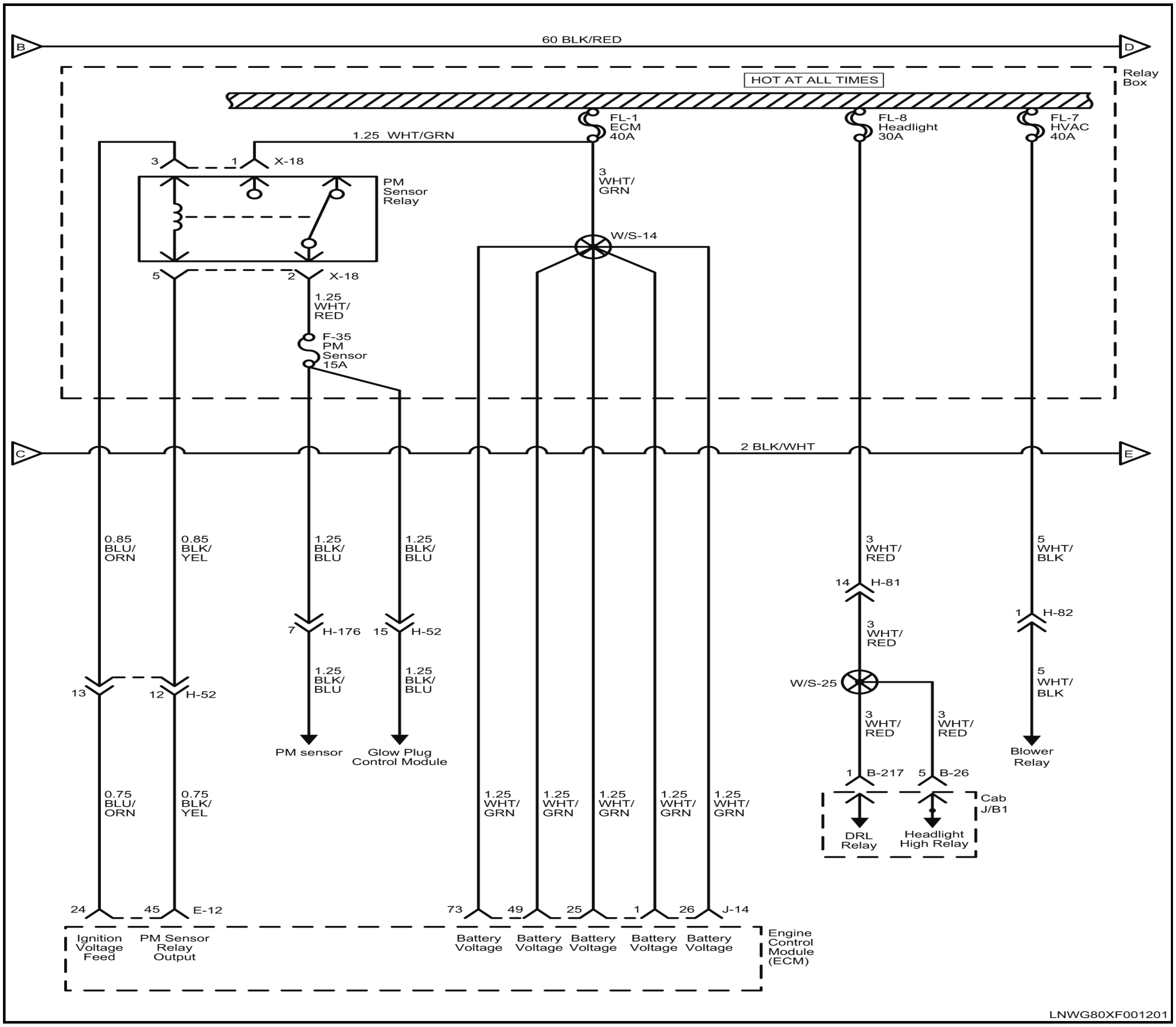
4651180

Circuit Diagram (CHASSIS) (2 of 7)


A
60 BLK/RED
B
Relay Box
HOT AT ALL TIMES
F-32 Tail Main 20A
F-31 Marker Lamp 20A
FL-3 Power ACC 50A
FL-10 Wiper 50A
FL-4 Glow 60A
FL-2 Starter 60A
1.25 GRN/BLK
1.25 GRN/BLK
Cab J/B1
F-27 Tail Lamps 10A
6 B-23
1.25 YEL
11 B-134
Sub J/B1
2 B-132
0.5 BRN
4 H-82
0.85 GRN/RED
0.85 LT GRN
5 RED/BLK
3 WHT/BLK
5 BLU/BLK
8 BLU/BLK
1 H-53
8 BLU/BLK
2 H-82
22 H-81
5 RED/BLK
3 WHT/BLK
2 B-26
Cab J/B1
F-25 Horn 15A
Power ACC Relay
Horn Relay
Glow Plug Control Module
P/N Start Relay
Cab J/B1
15 B-22
0.5 LT GRN
4 H-81
0.85 BLK/WHT
3 WHT/BLK
3
1 X-17
Starter Relay
5
2 X-17
0.85 BLK/WHT
3 BLK/WHT
H-53
2
2 BLK/WHT
C
4 H-52
0.5 BLK/WHT
0.5 WHT/BLK
63 J-14
47 E-12
Switch Signal
Relay Control
Engine Control Module (ECM)
5
6 H-89
1.25 BLU
1.25 LT BLU
1 B-133
18 B-138
Sub J/B1
2 B-131
2 GRN/BLK
4 B-26
Cab J/B1
Tail Relay
3
2 X-26
Marker Light Relay
5
1 X-26
0.85 GRN/RED
0.5 GRN/RED
5 H-101
0.5 GRN/RED
5 H-66
0.5 GRN/RED
0.5 GRN/RED
0.5 GRN/RED
0.5 GRN/RED
License Plate Light
Rear Combination Light LH
Rear Combination Light RH
0.85 BLK
W/S-7
3 BLK
J-12
Refer to Ground Distribution
1.25 LT GRN/BLK
29 H-101
0.85 LT GRN/BLK
Rear Manufacture Connector
LNWG80XF007501

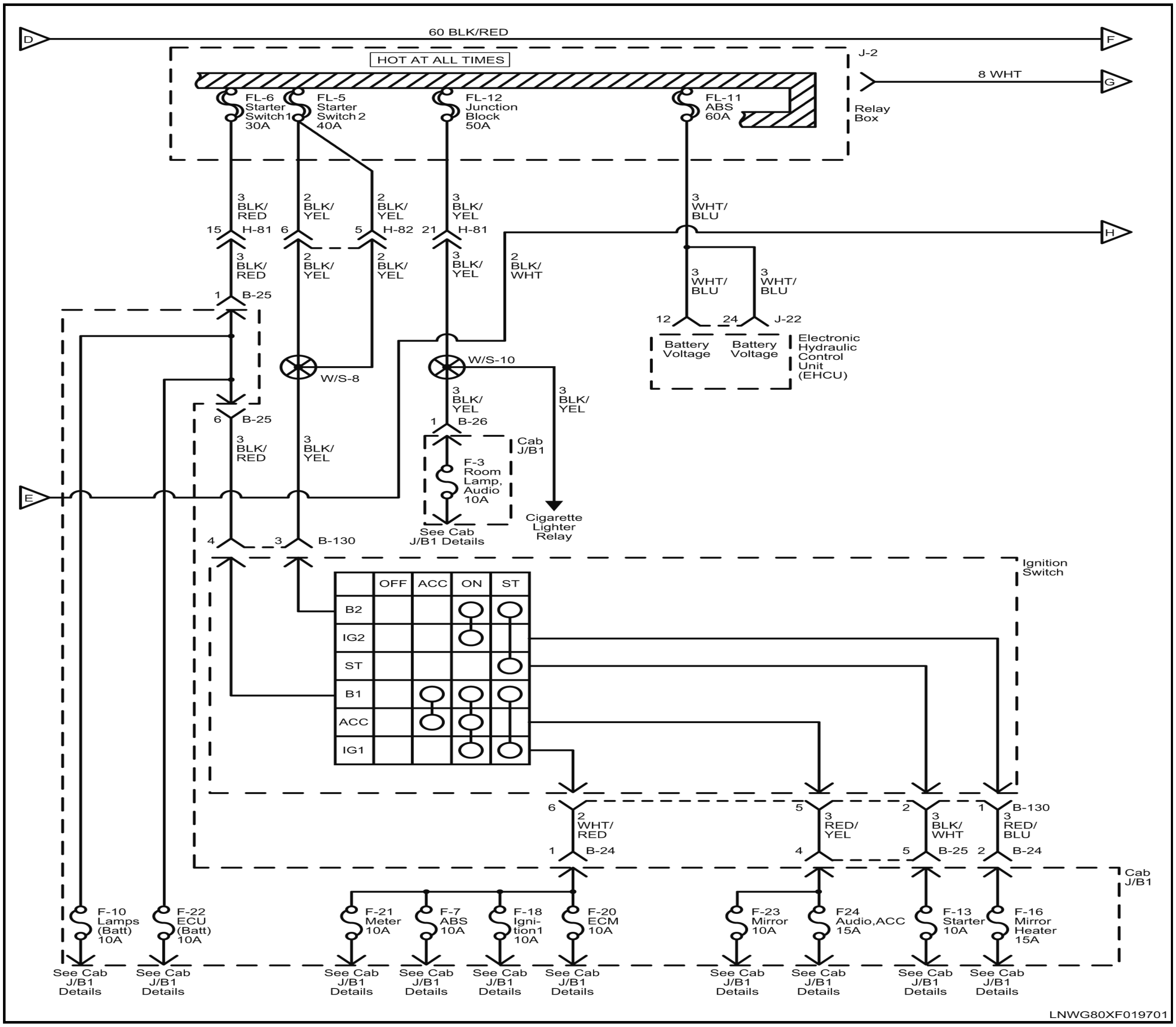
4496138

Circuit Diagram (CHASSIS) (3 of 7)


B
60 BLK/RED
D
HOT AT ALL TIMES
Relay Box
FL-1 ECM 40A
FL-8 Headlight 30A
FL-7 HVAC 40A
1.25 WHT/GRN
3
1
X-18
PM Sensor Relay
3 WHT/GRN
W/S-14
5
2
X-18
1.25 WHT/RED
F-35 PM Sensor 15A
C
2 BLK/WHT
E
0.85 BLU/ORN
0.85 BLK/YEL
1.25 BLK/BLU
1.25 BLK/BLU
3 WHT/RED
5 WHT/BLK
14
H-81
1
H-82
7
H-176
15
H-52
3 WHT/RED
13
12
H-52
1.25 BLK/BLU
1.25 BLK/BLU
W/S-25
5 WHT/BLK
3 WHT/RED
3 WHT/RED
PM sensor
Glow Plug Control Module
Blower Relay
1
B-217
5
B-26
Cab J/B1
0.75 BLU/ORN
0.75 BLK/YEL
1.25 WHT/GRN
1.25 WHT/GRN
1.25 WHT/GRN
1.25 WHT/GRN
1.25 WHT/GRN
DRL Relay
Headlight High Relay
24
45
E-12
73
49
25
1
26
J-14
Ignition Voltage Feed
PM Sensor Relay Output
Battery Voltage
Battery Voltage
Battery Voltage
Battery Voltage
Battery Voltage
Engine Control Module (ECM)
LNWG80XF001201

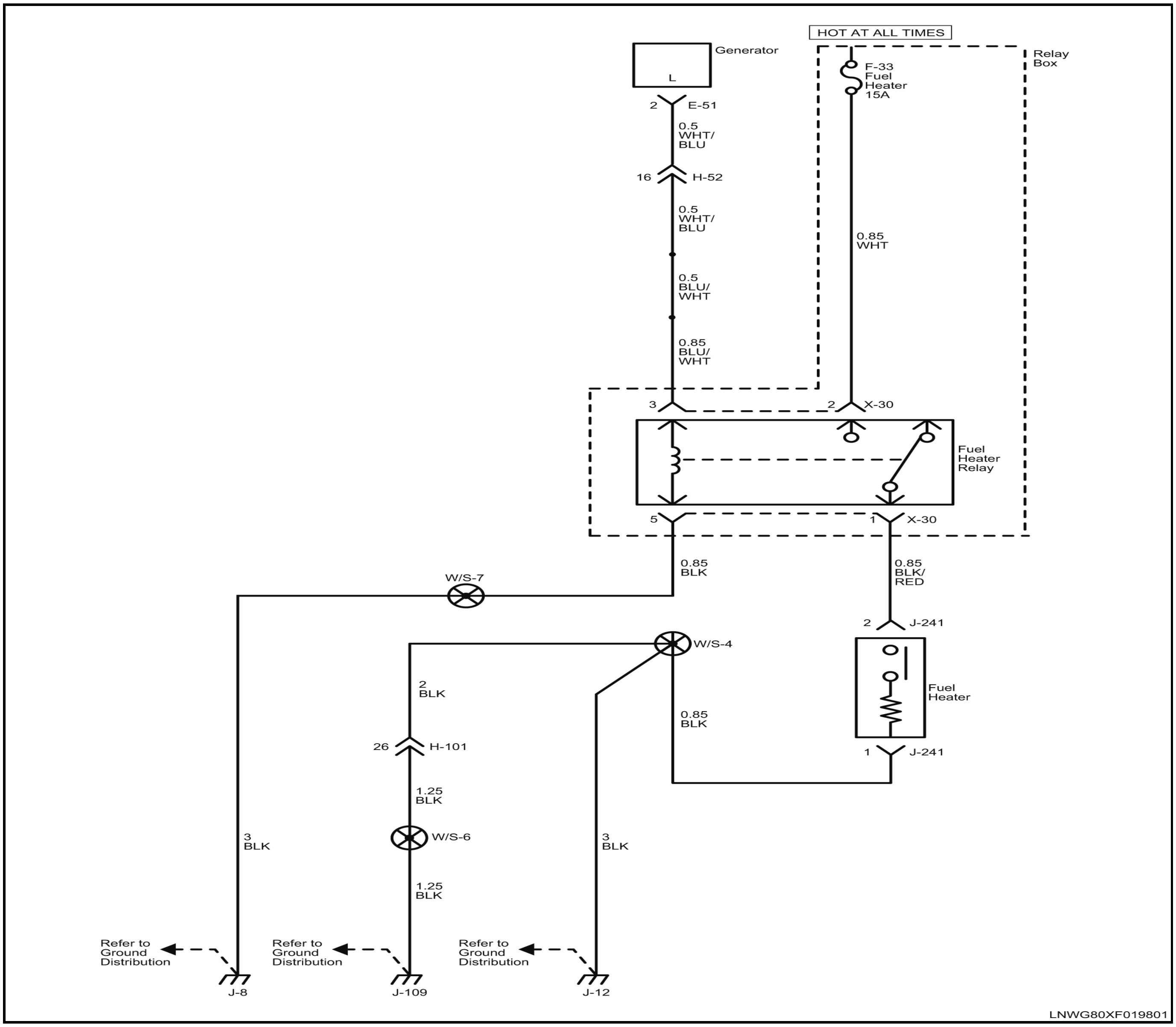
4496144

Circuit Diagram (CHASSIS) (4 of 7)


D
60 BLK/RED
F
HOT AT ALL TIMES
J-2
8 WHT
G
Relay Box
FL-6 Starter Switch1 30A
FL-5 Starter Switch 2 40A
FL-12 Junction Block 50A
FL-11 ABS 60A
3 BLK/ RED
2 BLK/ YEL
2 BLK/ YEL
3 BLK/ YEL
3 WHT/ BLU
15 H-81
6
5 H-82
21 H-81
H
3 BLK/ RED
2 BLK/ YEL
2 BLK/ YEL
3 BLK/ YEL
2 BLK/ WHT
3 WHT/ BLU
3 WHT/ BLU
1 B-25
12
24 J-22
Battery Voltage
Battery Voltage
Electronic Hydraulic Control Unit (EHCU)
W/S-8
W/S-10
3 BLK/ YEL
3 BLK/ YEL
1 B-26
6 B-25
3 BLK/ RED
3 BLK/ YEL
Cab J/B1
F-3 Room Lamp, Audio 10A
E
See Cab J/B1 Details
Cigarette Lighter Relay
4
3 B-130
Ignition Switch
OFF
ACC
ON
ST
B2
IG2
ST
B1
ACC
IG1
6
2 WHT/ RED
1 B-24
5
3 RED/ YEL
4
2
3 BLK/ WHT
5 B-25
1 B-130
3 RED/ BLU
2 B-24
Cab J/B1
F-10 Lamps (Batt) 10A
F-22 ECU (Batt) 10A
F-21 Meter 10A
F-7 ABS 10A
F-18 Igni- tion1 10A
F-20 ECM 10A
F-23 Mirror 10A
F24 Audio,ACC 15A
F-13 Starter 10A
F-16 Mirror Heater 15A
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
See Cab J/B1 Details
LNWG80XF019701

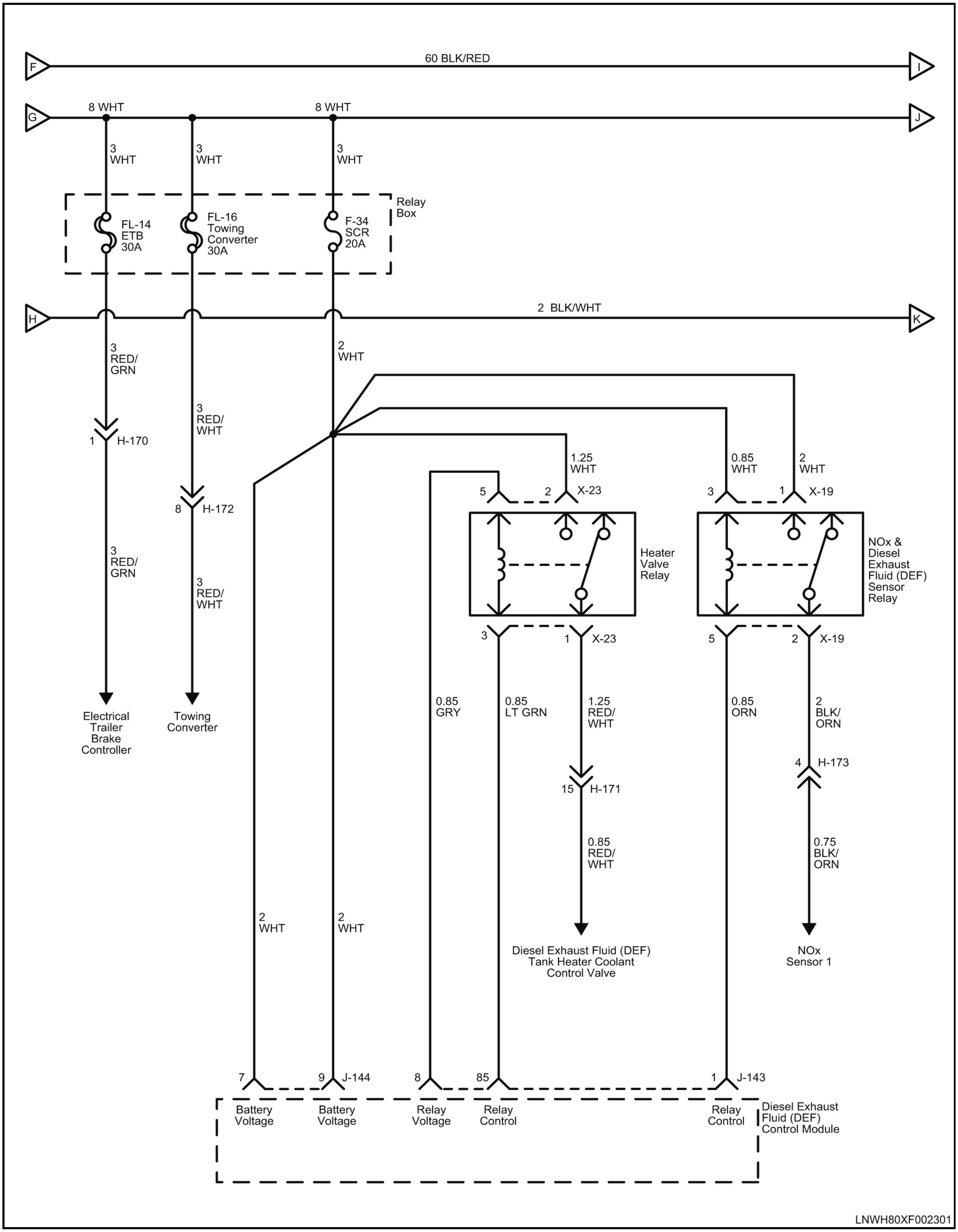
4496147

Circuit Diagram (CHASSIS) (5 of 7)


HOT AT ALL TIMES
Generator
L
Relay Box
F-33 Fuel Heater 15A
2 E-51
0.5 WHT/ BLU
16 H-52
0.5 WHT/ BLU
0.85 WHT
0.5 BLU/ WHT
0.85 BLU/ WHT
3
2 X-30
Fuel Heater Relay
5
1 X-30
0.85 BLK
0.85 BLK/ RED
W/S-7
2 J-241
W/S-4
Fuel Heater
2 BLK
0.85 BLK
26 H-101
1 J-241
1.25 BLK
W/S-6
3 BLK
3 BLK
1.25 BLK
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
J-8
J-109
J-12
LNWG80XF019801

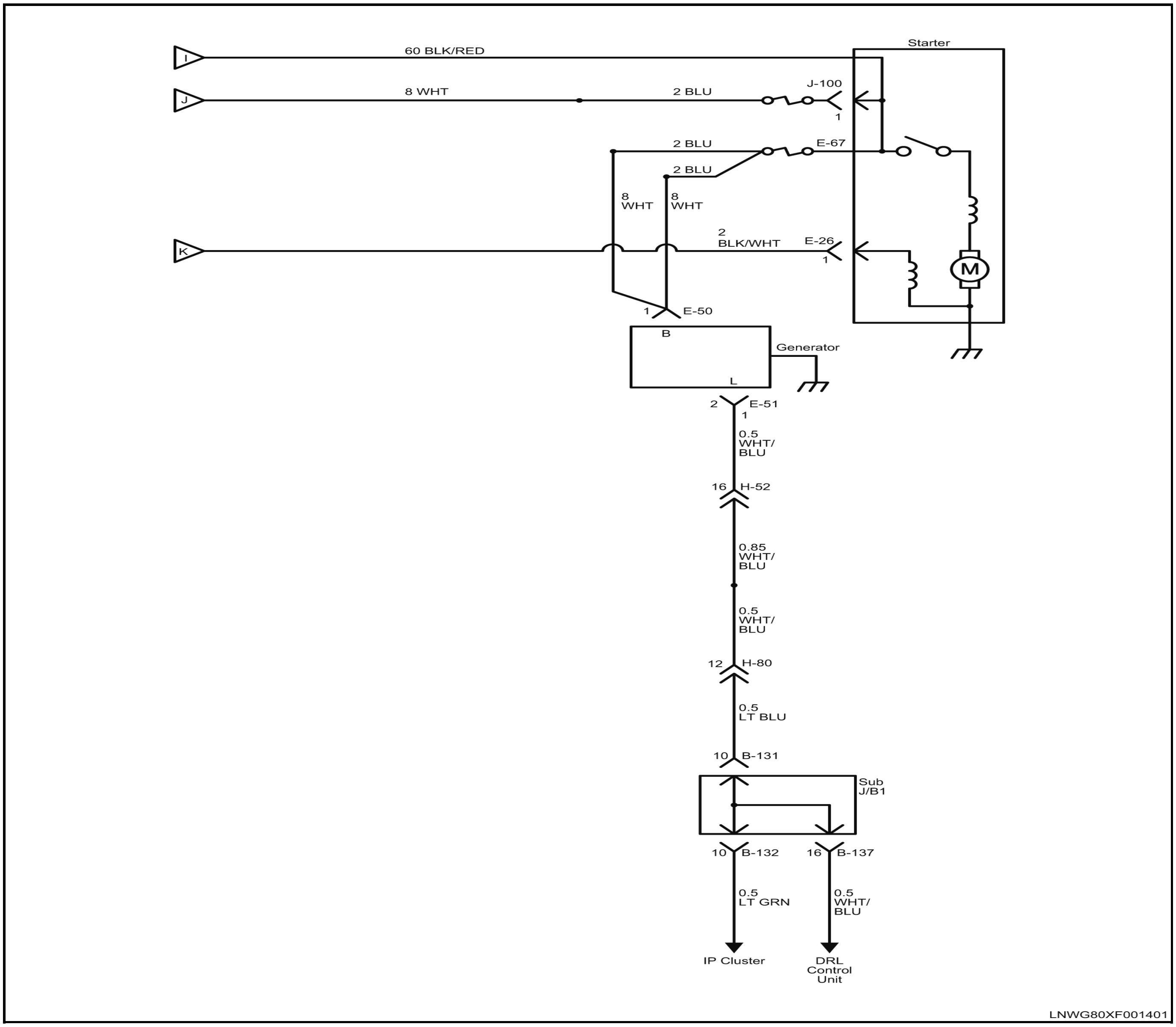
4496148

Circuit Diagram (CHASSIS) (6 of 7)


F
60 BLK/RED
I
G
8 WHT
8 WHT
J
3 WHT
3 WHT
3 WHT
Relay Box
FL-14 ETB 30A
FL-16 Towing Converter 30A
F-34 SCR 20A
H
2 BLK/WHT
K
3 RED/GRN
2 WHT
1 H-170
3 RED/WHT
3 RED/GRN
8 H-172
3 RED/WHT
1.25 WHT
0.85 WHT
2 WHT
5 2 X-23
3 1 X-19
Heater Valve Relay
NOx & Diesel Exhaust Fluid (DEF) Sensor Relay
3 1 X-23
5 2 X-19
Electrical Trailer Brake Controller
Towing Converter
0.85 GRY
0.85 LT GRN
1.25 RED/WHT
0.85 ORN
2 BLK/ORN
4 H-173
15 H-171
0.85 RED/WHT
0.75 BLK/ORN
2 WHT
2 WHT
Diesel Exhaust Fluid (DEF) Tank Heater Coolant Control Valve
NOx Sensor 1
7 9 J-144
8 85
1 J-143
Battery Voltage
Battery Voltage
Relay Voltage
Relay Control
Relay Control
Diesel Exhaust Fluid (DEF) Control Module
LNWH80XF002301

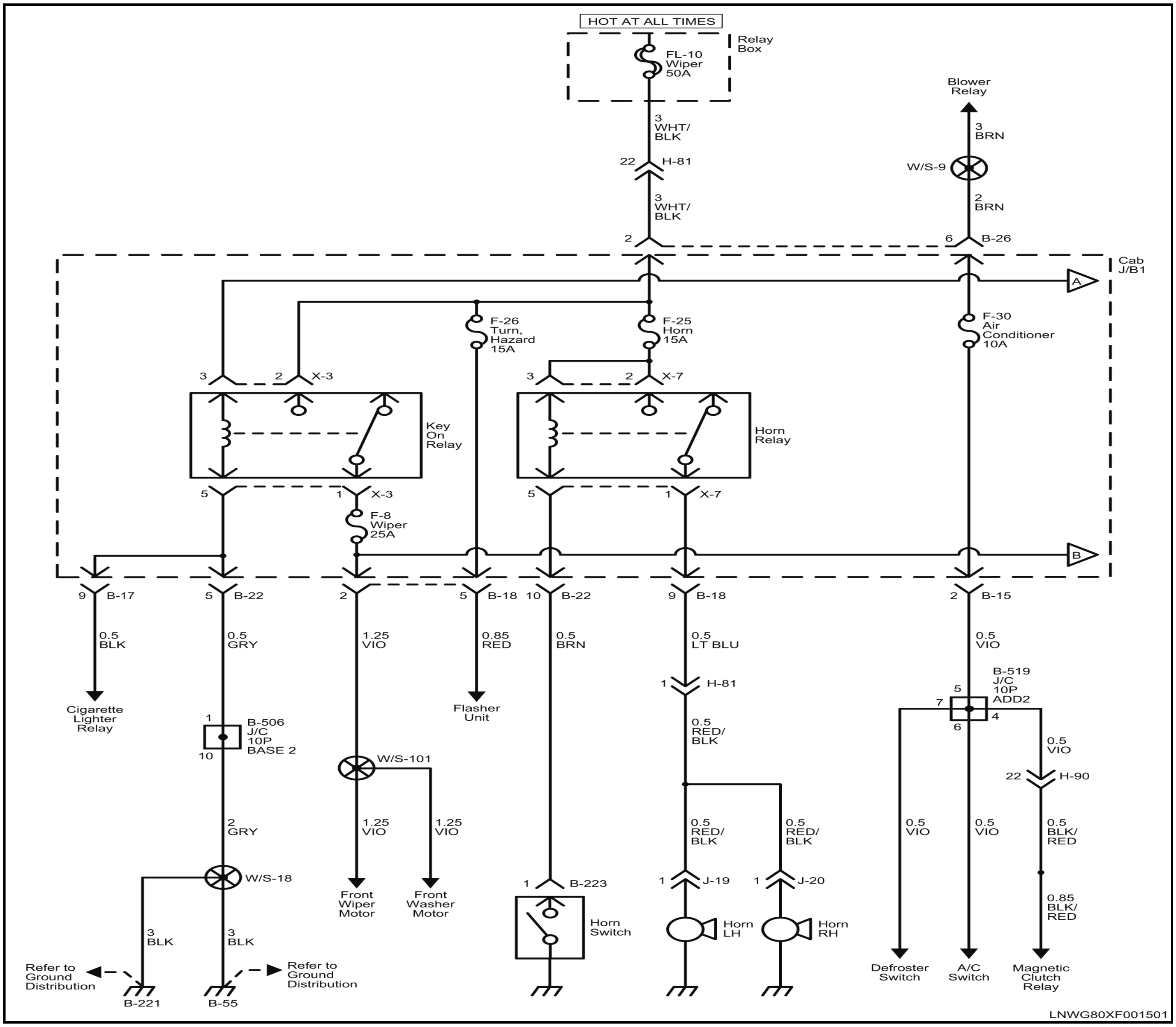
4645319

Circuit Diagram (CHASSIS) (7 of 7)


I
J
K
60 BLK/RED
8 WHT
2 BLU
J-100
1
Starter
2 BLU
E-67
2 BLU
8 WHT
8 WHT
2 BLK/WHT
E-26
1
M
1
E-50
B
Generator
L
2
E-51
1
0.5 WHT/BLU
16
H-52
0.85 WHT/BLU
0.5 WHT/BLU
12
H-80
0.5 LT BLU
10
B-131
Sub J/B1
10
B-132
16
B-137
0.5 LT GRN
0.5 WHT/BLU
IP Cluster
DRL Control Unit
LNWG80XF001401

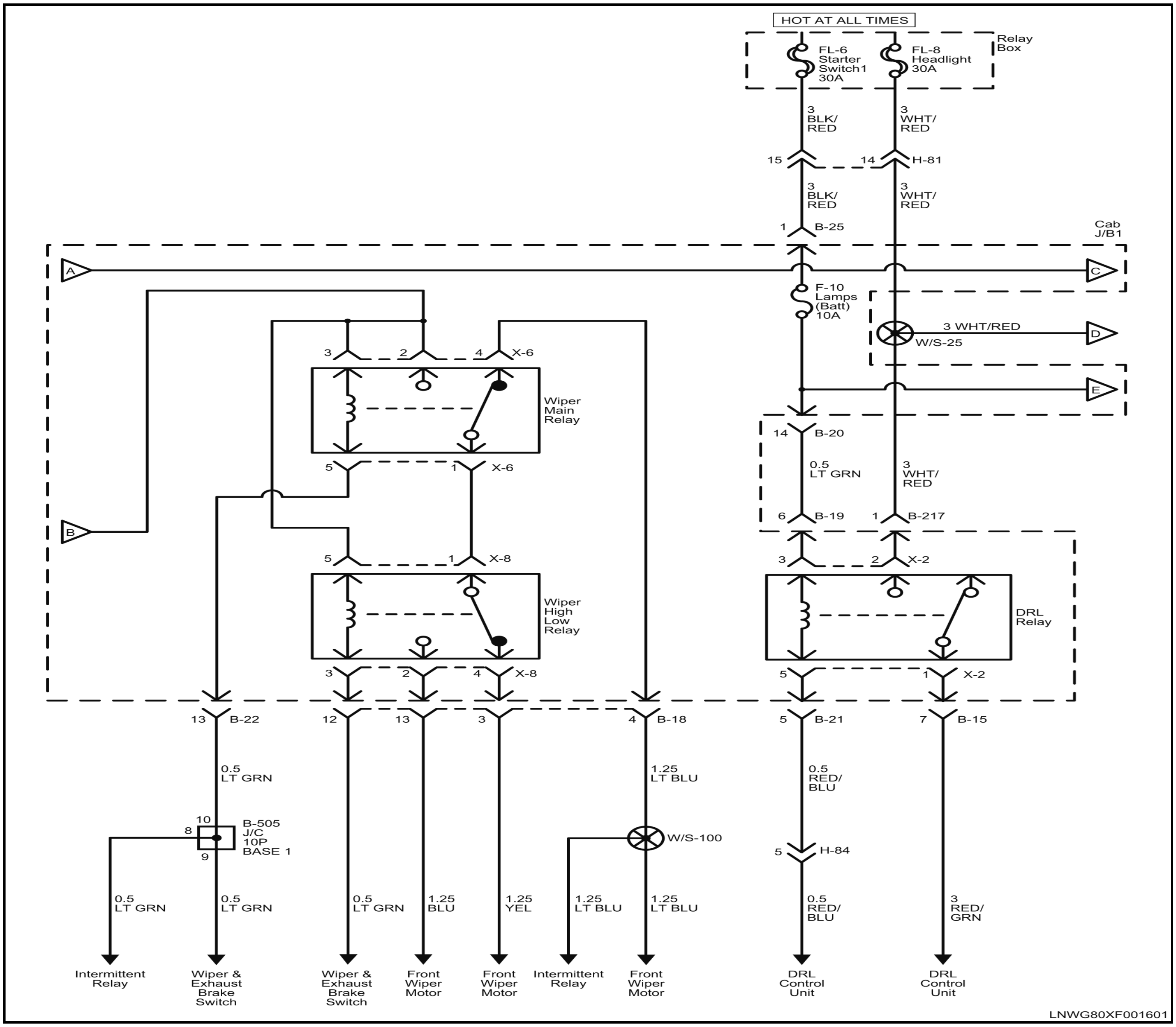
4496153

Circuit Diagram (CABIN) (1 of 10)


HOT AT ALL TIMES
Relay Box
FL-10 Wiper 50A
3 WHT/BLK
22 H-81
3 WHT/BLK
2
Blower Relay
3 BRN
W/S-9
2 BRN
6 B-26
Cab J/B1
A
F-26 Turn, Hazard 15A
F-25 Horn 15A
F-30 Air Conditioner 10A
3
2 X-3
3
2 X-7
Key On Relay
Horn Relay
5
1 X-3
5
1 X-7
F-8 Wiper 25A
B
9 B-17
5 B-22
2
5 B-18
10 B-22
9 B-18
2 B-15
0.5 BLK
0.5 GRY
1.25 VIO
0.85 RED
0.5 BRN
0.5 LT BLU
0.5 VIO
Cigarette Lighter Relay
Flasher Unit
1 H-81
B-519 J/C 10P ADD2
5
7
4
6
1
B-506 J/C 10P BASE 2
10
0.5 RED/BLK
0.5 VIO
22 H-90
W/S-101
2 GRY
1.25 VIO
1.25 VIO
0.5 RED/BLK
0.5 RED/BLK
0.5 VIO
0.5 VIO
0.5 BLK/RED
W/S-18
Front Wiper Motor
Front Washer Motor
1 B-223
Horn Switch
1 J-19
1 J-20
Horn LH
Horn RH
0.85 BLK/RED
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
Defroster Switch
A/C Switch
Magnetic Clutch Relay
LNWG80XF001501

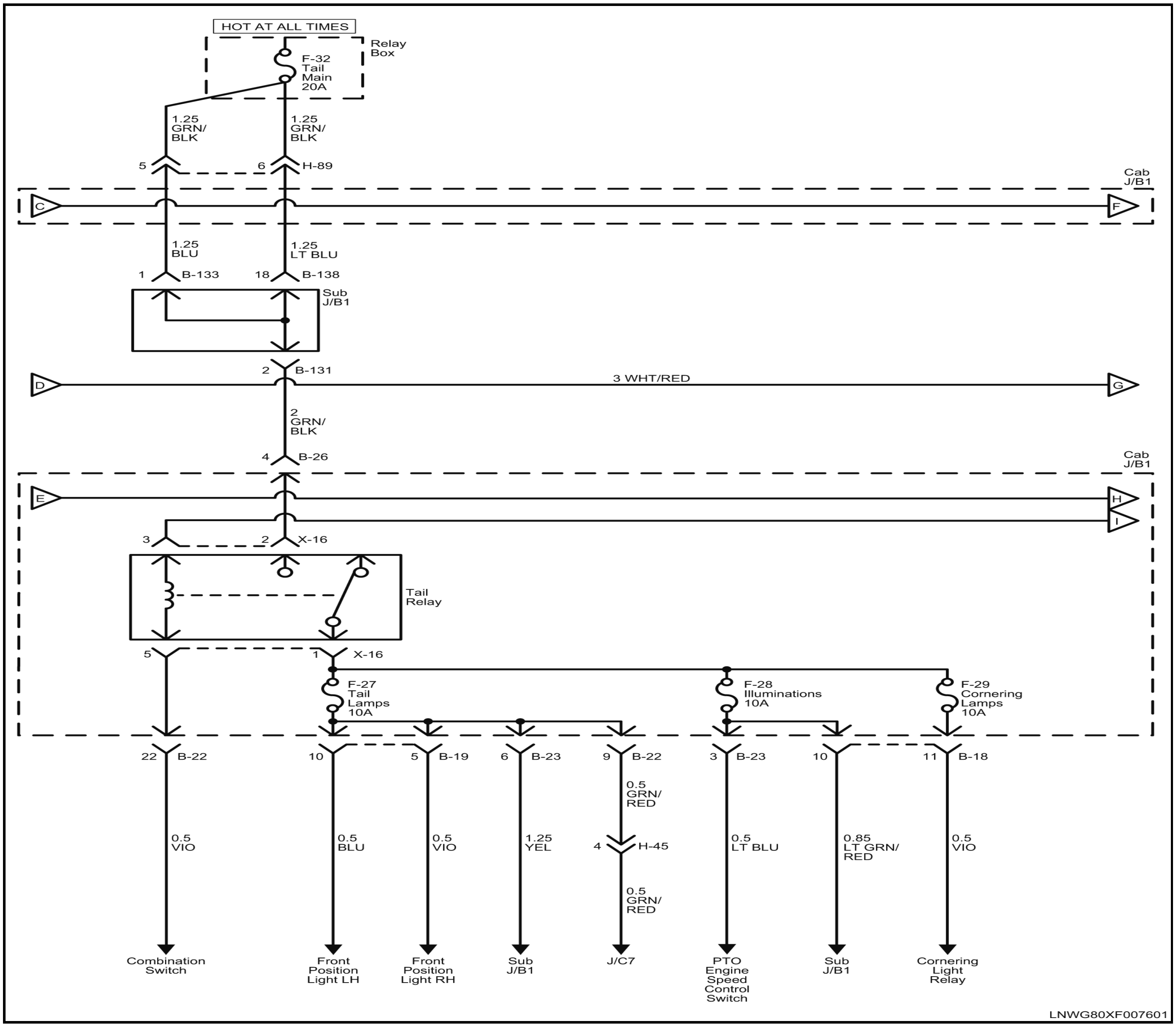
4496155

Circuit Diagram (CABIN) (2 of 10)


HOT AT ALL TIMES
Relay Box
FL-6 Starter Switch1 30A
FL-8 Headlight 30A
3 BLK/RED
3 WHT/RED
15
14
H-81
3 BLK/RED
3 WHT/RED
1
B-25
Cab J/B1
A
C
F-10 Lamps (Batt) 10A
3 WHT/RED
W/S-25
D
E
3
2
4
X-6
Wiper Main Relay
5
1
X-6
14
B-20
0.5 LT GRN
3 WHT/RED
6
B-19
1
B-217
B
5
1
X-8
3
2
X-2
Wiper High Low Relay
DRL Relay
3
2
4
X-8
5
1
X-2
13
B-22
12
13
3
4
B-18
5
B-21
7
B-15
0.5 LT GRN
1.25 LT BLU
0.5 RED/BLU
10
8
9
B-505 J/C 10P BASE 1
W/S-100
5
H-84
0.5 LT GRN
0.5 LT GRN
0.5 LT GRN
1.25 BLU
1.25 YEL
1.25 LT BLU
1.25 LT BLU
0.5 RED/BLU
3 RED/GRN
Intermittent Relay
Wiper & Exhaust Brake Switch
Wiper & Exhaust Brake Switch
Front Wiper Motor
Front Wiper Motor
Intermittent Relay
Front Wiper Motor
DRL Control Unit
DRL Control Unit
LNWG80XF001601

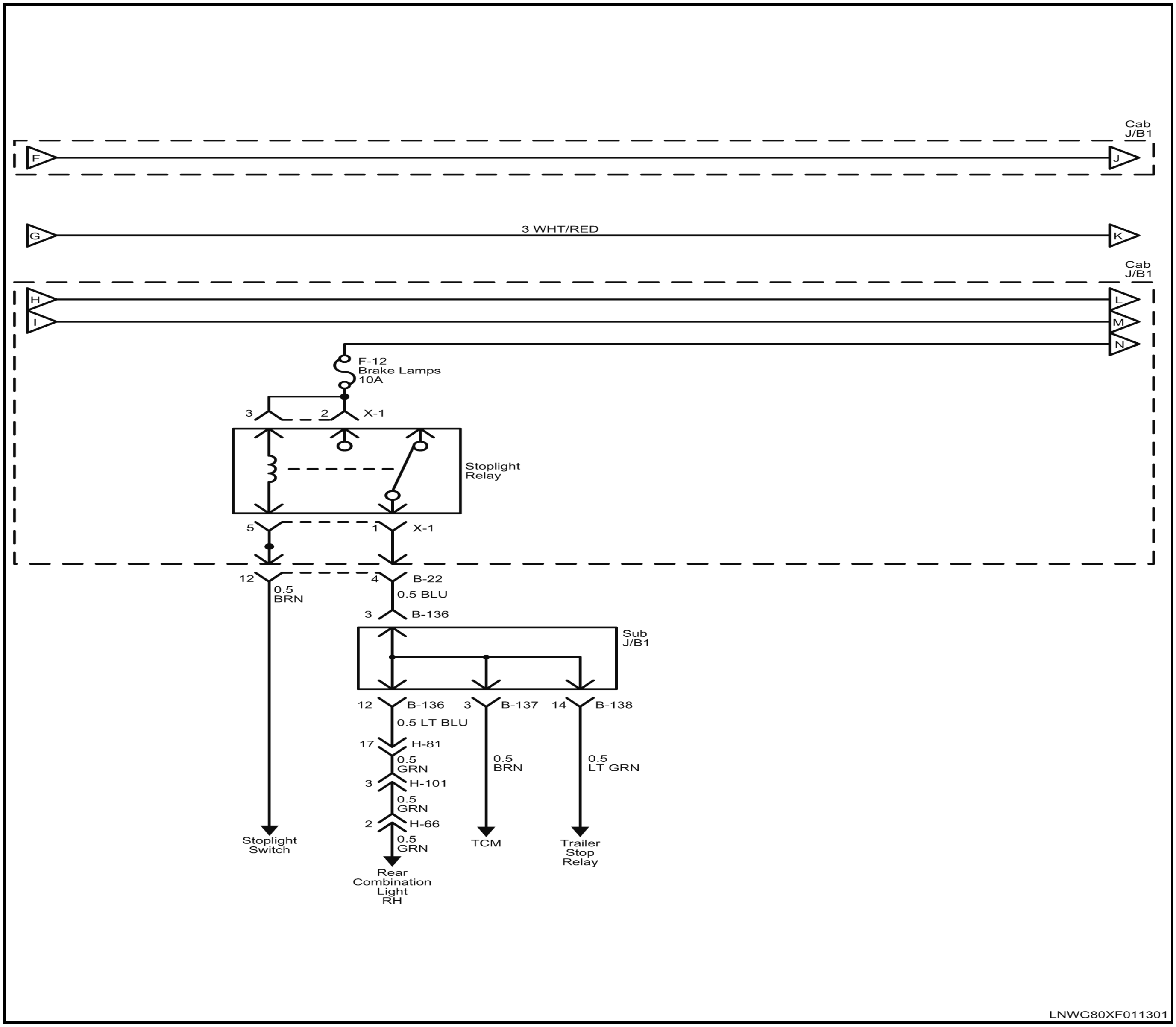
4496160

Circuit Diagram (CABIN) (3 of 10)


HOT AT ALL TIMES
Relay Box
F-32 Tail Main 20A
1.25 GRN/BLK
1.25 GRN/BLK
5
6
H-89
Cab J/B1
C
F
1.25 BLU
1.25 LT BLU
1 B-133
18 B-138
Sub J/B1
2 B-131
D
3 WHT/RED
G
2 GRN/BLK
4 B-26
Cab J/B1
E
H
I
3
2 X-16
Tail Relay
5
1 X-16
F-27 Tail Lamps 10A
F-28 Illuminations 10A
F-29 Cornering Lamps 10A
22 B-22
10
5 B-19
6 B-23
9 B-22
3 B-23
10
11 B-18
0.5 GRN/RED
0.5 VIO
0.5 BLU
0.5 VIO
1.25 YEL
4 H-45
0.5 LT BLU
0.85 LT GRN/RED
0.5 VIO
0.5 GRN/RED
Combination Switch
Front Position Light LH
Front Position Light RH
Sub J/B1
J/C7
PTO Engine Speed Control Switch
Sub J/B1
Cornering Light Relay
LNWG80XF007601

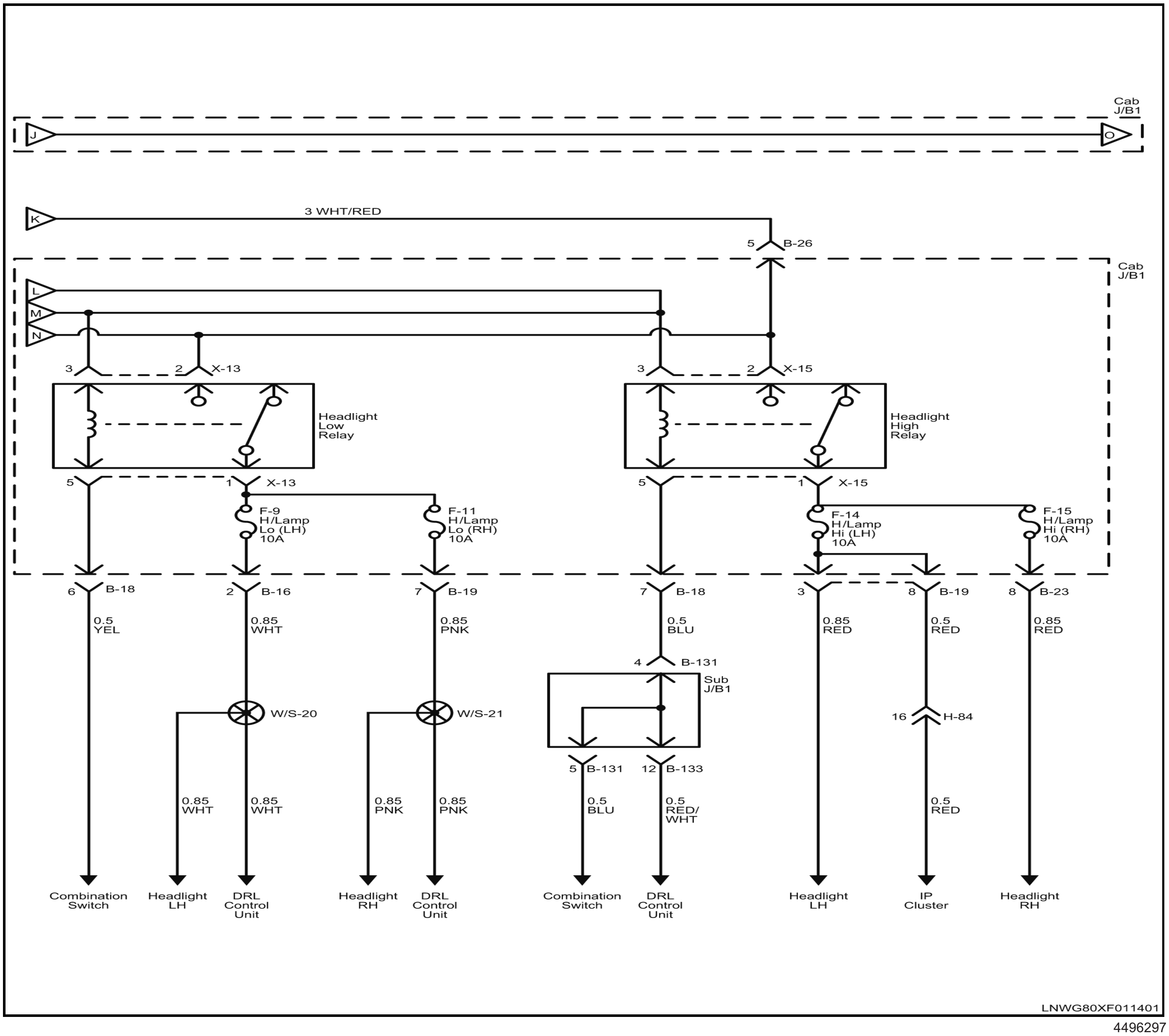
4496162

Circuit Diagram (CABIN) (4 of 10)

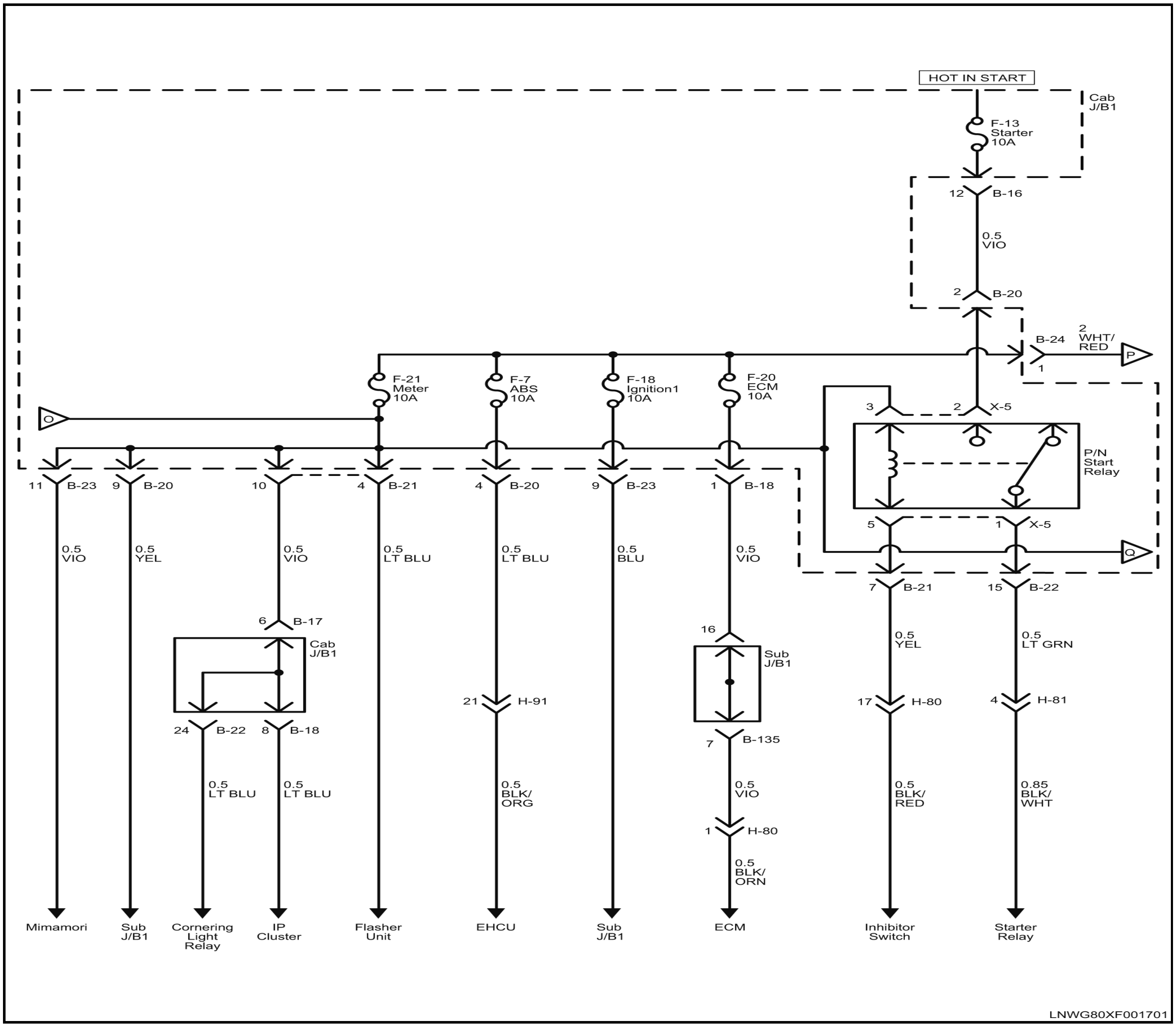

Cab
J/B1
F
J
G
3 WHT/RED
K
Cab
J/B1
H
L
I
M
N
F-12
Brake Lamps
10A
3
2
X-1
Stoplight
Relay
5
1
X-1
12
0.5
BRN
4
B-22
0.5 BLU
3
B-136
Sub
J/B1
12
B-136
3
B-137
14
B-138
0.5 LT BLU
17
H-81
0.5
GRN
3
H-101
0.5
GRN
2
H-66
0.5
GRN
0.5
BRN
0.5
LT GRN
Stoplight
Switch
Rear
Combination
Light
RH
TCM
Trailer
Stop
Relay
LNWG80XF011301

4496193

Circuit Diagram (CABIN) (5 of 10)

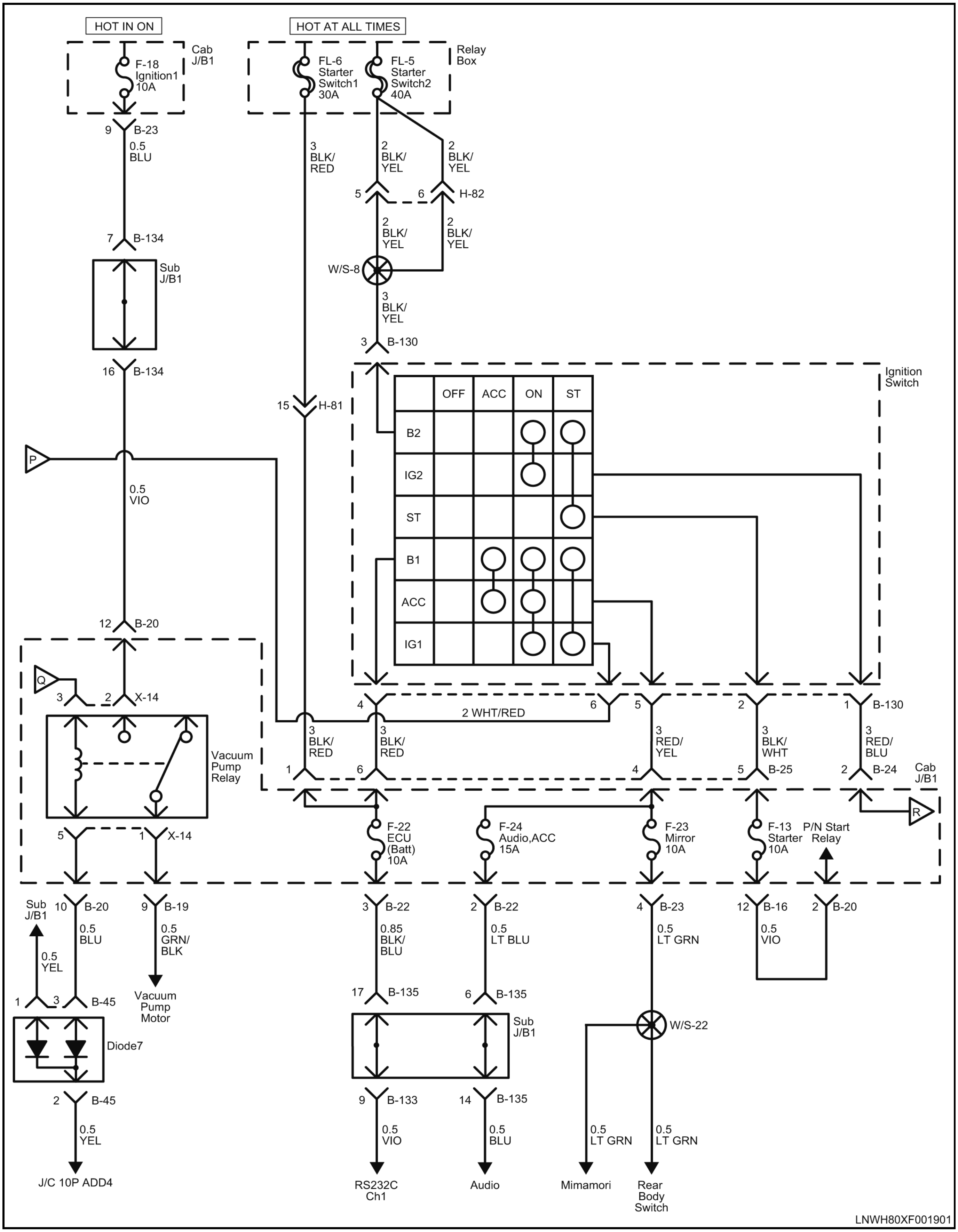

Cab J/B1
J
O
K
3 WHT/RED
5 B-26
Cab J/B1
L
M
N
3
2 X-13
3
2 X-15
Headlight Low Relay
Headlight High Relay
5
1 X-13
5
1 X-15
F-9 H/Lamp Lo (LH) 10A
F-11 H/Lamp Lo (RH) 10A
F-14 H/Lamp Hi (LH) 10A
F-15 H/Lamp Hi (RH) 10A
6 B-18
2 B-16
7 B-19
7 B-18
3
8 B-19
8 B-23
0.5 YEL
0.85 WHT
0.85 PNK
0.5 BLU
0.85 RED
0.5 RED
0.85 RED
4 B-131
Sub J/B1
W/S-20
W/S-21
16 H-84
5 B-131
12 B-133
0.85 WHT
0.85 WHT
0.85 PNK
0.85 PNK
0.5 BLU
0.5 RED/WHT
0.5 RED
Combination Switch
Headlight LH
DRL Control Unit
Headlight RH
DRL Control Unit
Combination Switch
DRL Control Unit
Headlight LH
IP Cluster
Headlight RH
LNWG80XF011401
4496297

Circuit Diagram (CABIN) (6 of 10)


HOT IN START
Cab J/B1
F-13 Starter 10A
12 B-16
0.5 VIO
2 B-20
B-24
2 WHT/RED
1
P
F-21 Meter 10A
F-7 ABS 10A
F-18 Ignition1 10A
F-20 ECM 10A
O
3
2 X-5
P/N Start Relay
11 B-23
9 B-20
10
4 B-21
4 B-20
9 B-23
1 B-18
5
1 X-5
Q
0.5 VIO
0.5 YEL
0.5 VIO
0.5 LT BLU
0.5 LT BLU
0.5 BLU
0.5 VIO
7 B-21
15 B-22
0.5 YEL
0.5 LT GRN
6 B-17
Cab J/B1
16
Sub J/B1
21 H-91
17 H-80
4 H-81
24 B-22
8 B-18
7 B-135
0.5 LT BLU
0.5 LT BLU
0.5 BLK/ORG
0.5 VIO
0.5 BLK/RED
0.85 BLK/WHT
1 H-80
0.5 BLK/ORN
Mimamori
Sub J/B1
Cornering Light Relay
IP Cluster
Flasher Unit
EHCU
Sub J/B1
ECM
Inhibitor Switch
Starter Relay
LNWG80XF001701

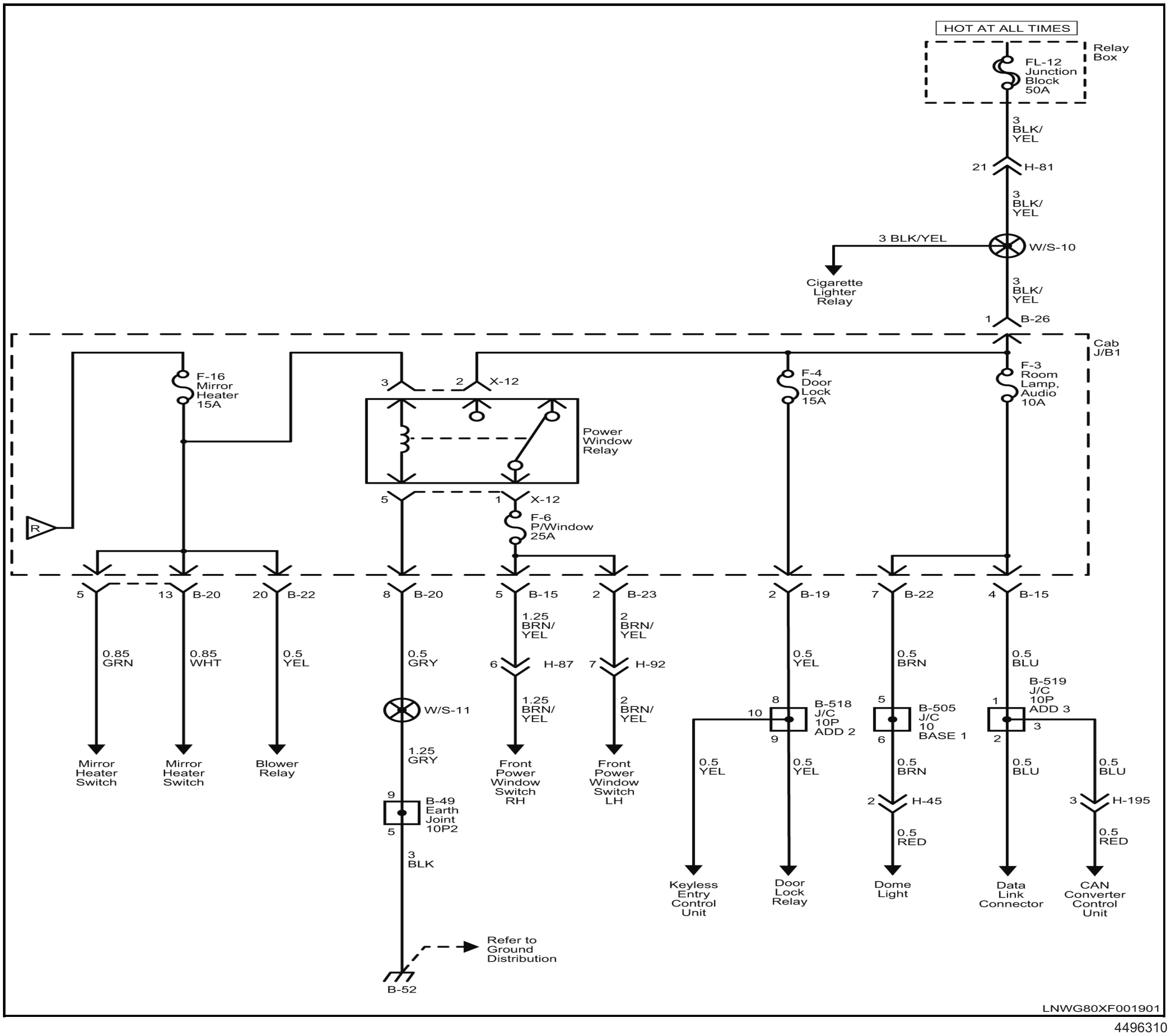
4496304

Circuit Diagram (CABIN) (7 of 10)

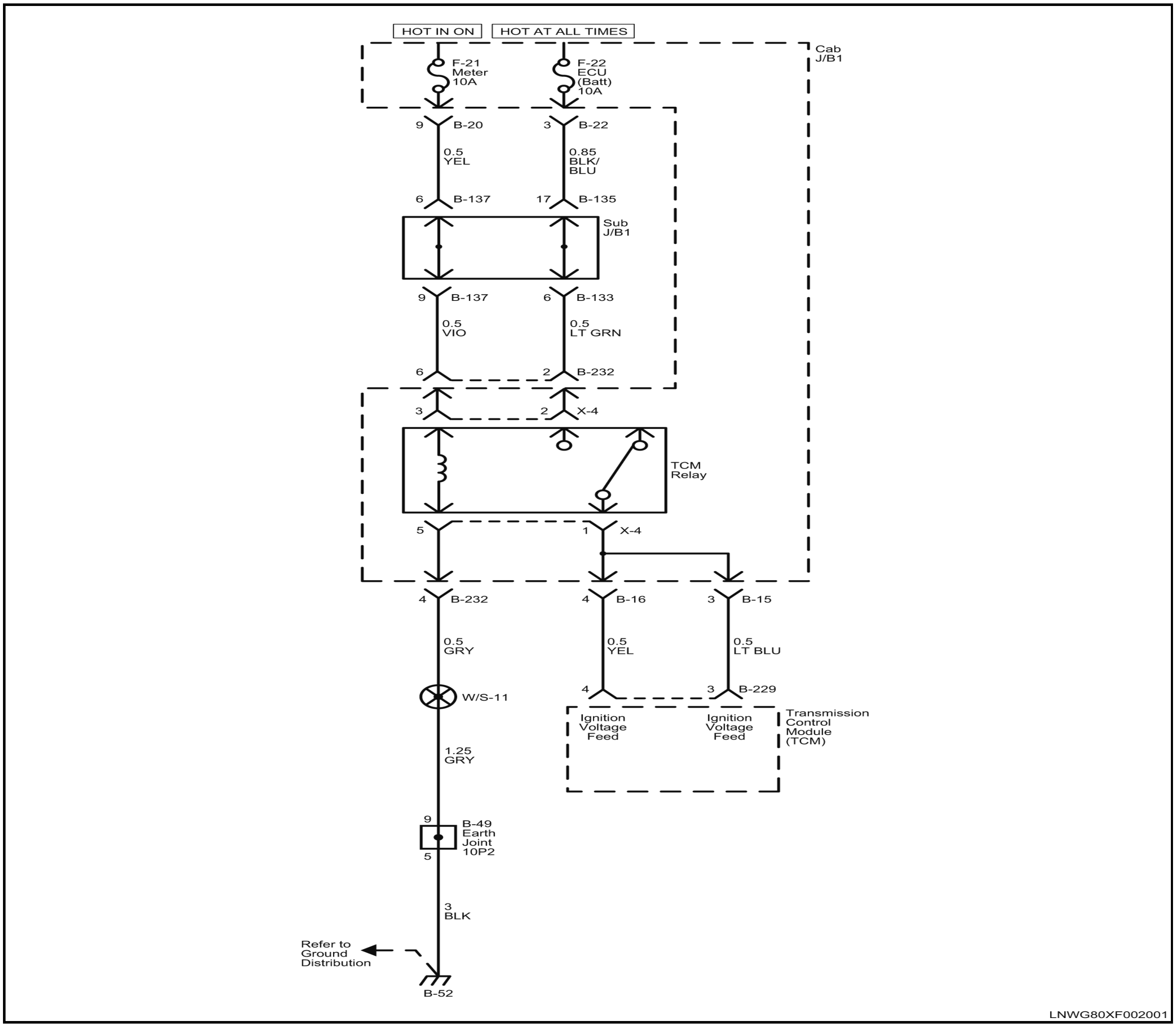

HOT IN ON
HOT AT ALL TIMES
Cab J/B1
F-18 Ignition1 10A
FL-6 Starter Switch1 30A
FL-5 Starter Switch2 40A
Relay Box
9 B-23
0.5 BLU
3 BLK/RED
2 BLK/YEL
2 BLK/YEL
5 6 H-82
2 BLK/YEL
2 BLK/YEL
7 B-134
Sub J/B1
W/S-8
3 BLK/YEL
3 B-130
16 B-134
15 H-81
Ignition Switch
OFF
ACC
ON
ST
B2
IG2
ST
B1
ACC
IG1
P
0.5 VIO
12 B-20
Q
3 2 X-14
Vacuum Pump Relay
4 6 5 2 1 B-130
2 WHT/RED
3 BLK/RED
3 BLK/RED
3 RED/YEL
3 BLK/WHT
3 RED/BLU
1 6 4 5 B-25 2 B-24
Cab J/B1
R
5 1 X-14
F-22 ECU (Batt) 10A
F-24 Audio,ACC 15A
F-23 Mirror 10A
F-13 Starter 10A
P/N Start Relay
Sub J/B1
10 B-20
9 B-19
3 B-22
2 B-22
4 B-23
12 B-16
2 B-20
0.5 YEL
0.5 BLU
0.5 GRN/BLK
0.85 BLK/BLU
0.5 LT BLU
0.5 LT GRN
0.5 VIO
1 3 B-45
Vacuum Pump Motor
17 B-135
6 B-135
Sub J/B1
W/S-22
Diode7
2 B-45
9 B-133
14 B-135
0.5 YEL
0.5 VIO
0.5 BLU
0.5 LT GRN
0.5 LT GRN
J/C 10P ADD4
RS232C Ch1
Audio
Mimamori
Rear Body Switch
LNWH80XF001901

4645337

Circuit Diagram (CABIN) (8 of 10)

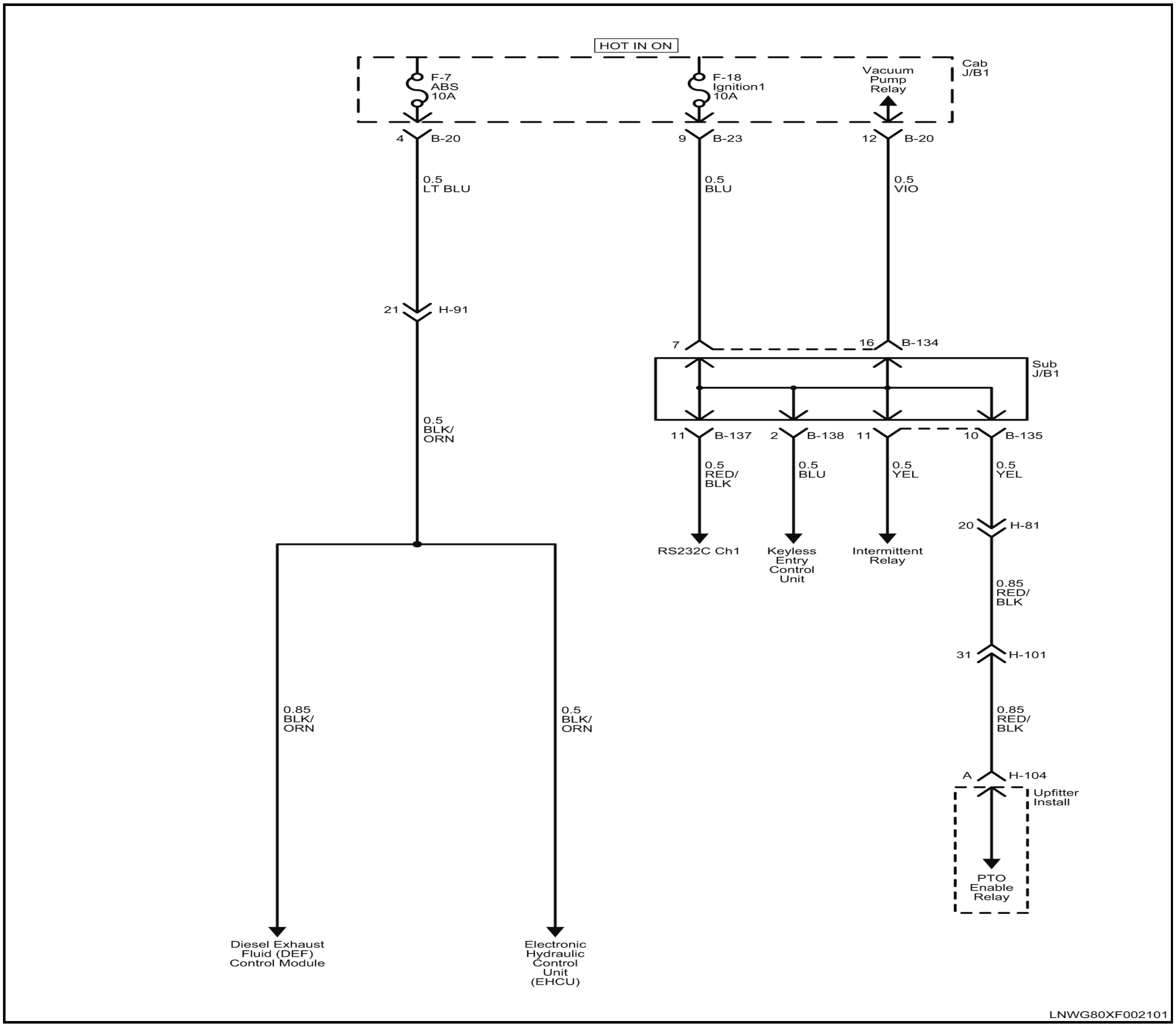

HOT AT ALL TIMES
Relay Box
FL-12 Junction Block 50A
3 BLK/YEL
21 H-81
3 BLK/YEL
3 BLK/YEL
W/S-10
Cigarette Lighter Relay
3 BLK/YEL
1 B-26
Cab J/B1
F-16 Mirror Heater 15A
3
2 X-12
Power Window Relay
F-4 Door Lock 15A
F-3 Room Lamp, Audio 10A
5
1 X-12
F-6 P/Window 25A
R
5
13 B-20
20 B-22
8 B-20
5 B-15
2 B-23
2 B-19
7 B-22
4 B-15
0.85 GRN
0.85 WHT
0.5 YEL
0.5 GRY
1.25 BRN/YEL
2 BRN/YEL
0.5 YEL
0.5 BRN
0.5 BLU
6 H-87
7 H-92
W/S-11
1.25 BRN/YEL
2 BRN/YEL
B-518 J/C 10P ADD 2
8
10
9
B-505 J/C 10 BASE 1
5
6
B-519 J/C 10P ADD 3
1
2
3
Mirror Heater Switch
Mirror Heater Switch
Blower Relay
1.25 GRY
Front Power Window Switch RH
Front Power Window Switch LH
0.5 YEL
0.5 YEL
0.5 BRN
0.5 BLU
0.5 BLU
9
B-49 Earth Joint 10P2
5
2 H-45
3 H-195
0.5 RED
0.5 RED
3 BLK
Keyless Entry Control Unit
Door Lock Relay
Dome Light
Data Link Connector
CAN Converter Control Unit
Refer to Ground Distribution
B-52
LNWG80XF001901
4496310

Circuit Diagram (CABIN) (9 of 10)


HOT IN ON
HOT AT ALL TIMES
Cab J/B1
F-21 Meter 10A
F-22 ECU (Batt) 10A
9 B-20
3 B-22
0.5 YEL
0.85 BLK/ BLU
6 B-137
17 B-135
Sub J/B1
9 B-137
6 B-133
0.5 VIO
0.5 LT GRN
6
2 B-232
3
2 X-4
TCM Relay
5
1 X-4
4 B-232
4 B-16
3 B-15
0.5 GRY
0.5 YEL
0.5 LT BLU
W/S-11
4
3 B-229
Ignition Voltage Feed
Ignition Voltage Feed
Transmission Control Module (TCM)
1.25 GRY
9
B-49 Earth Joint 10P2
5
3 BLK
Refer to Ground Distribution
B-52
LNWG80XF002001

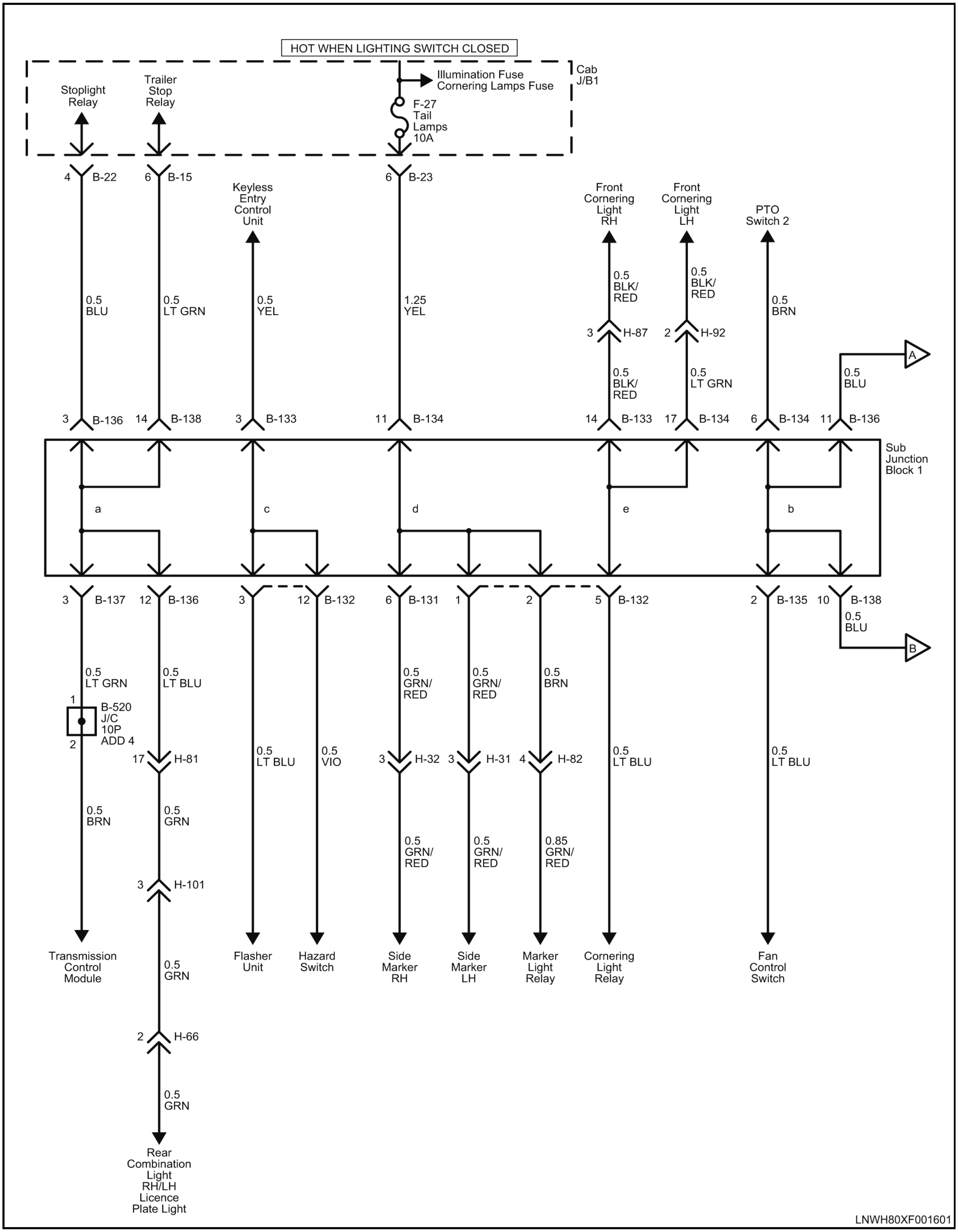
4496313

Circuit Diagram (CABIN) (10 of 10)

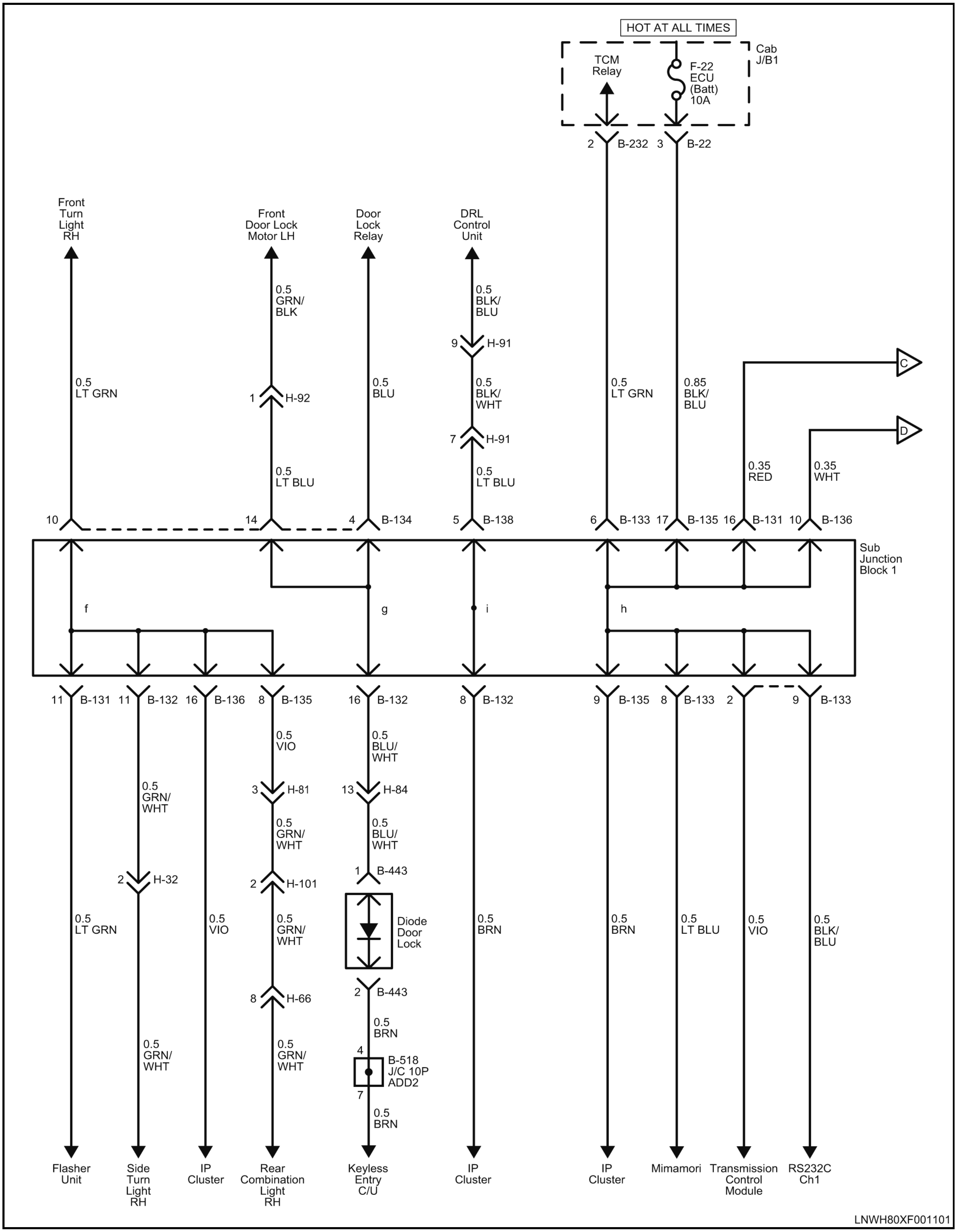

HOT IN ON
F-7
ABS
10A
F-18
Ignition1
10A
Vacuum
Pump
Relay
Cab
J/B1
4
B-20
9
B-23
12
B-20
0.5
LT BLU
0.5
BLU
0.5
VIO
21
H-91
7
16
B-134
Sub
J/B1
0.5
BLK/
ORN
11
B-137
2
B-138
11
10
B-135
0.5
RED/
BLK
0.5
BLU
0.5
YEL
0.5
YEL
RS232C Ch1
Keyless
Entry
Control
Unit
Intermittent
Relay
20
H-81
0.85
RED/
BLK
31
H-101
0.85
RED/
BLK
A
H-104
Upfitter
Install
PTO
Enable
Relay
0.85
BLK/
ORN
0.5
BLK/
ORN
Diesel Exhaust
Fluid (DEF)
Control Module
Electronic
Hydraulic
Control
Unit
(EHCU)
LNWG80XF002101

4496315

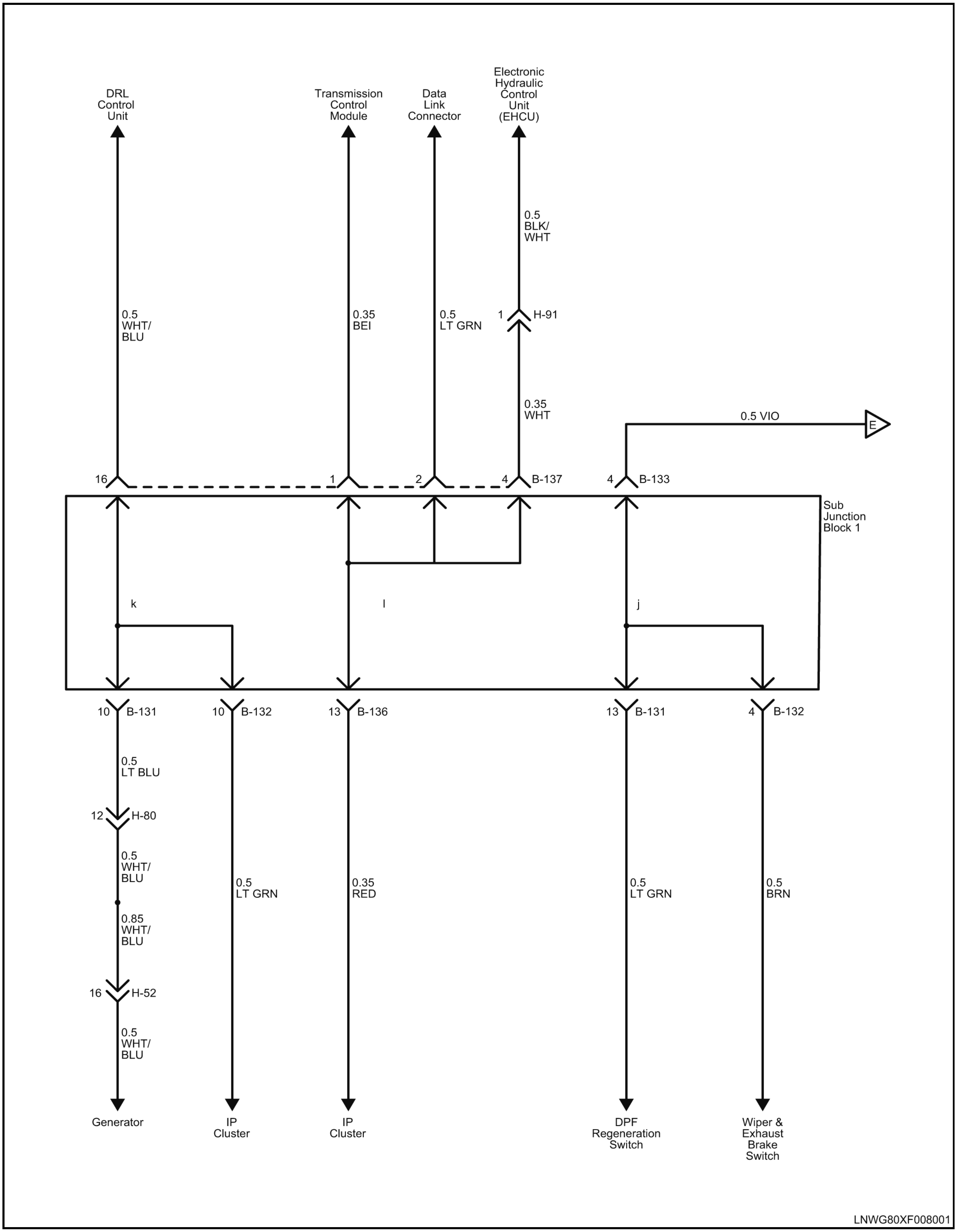
Sub Junction Block 1 Schematics


HOT WHEN LIGHTING SWITCH CLOSED
Cab J/B1
Stoplight Relay
Trailer Stop Relay
Illumination Fuse
Cornering Lamps Fuse
F-27 Tail Lamps 10A
4 B-22
6 B-15
6 B-23
Keyless Entry Control Unit
Front Cornering Light RH
Front Cornering Light LH
PTO Switch 2
0.5 BLU
0.5 LT GRN
0.5 YEL
1.25 YEL
0.5 BLK/RED
0.5 BLK/RED
0.5 BRN
3 H-87
2 H-92
0.5 BLK/RED
0.5 LT GRN
0.5 BLU
A
3 B-136
14 B-138
3 B-133
11 B-134
14 B-133
17 B-134
6 B-134
11 B-136
Sub Junction Block 1
a
c
d
e
b
3 B-137
12 B-136
3
12 B-132
6 B-131
1
2
5 B-132
2 B-135
10 B-138
0.5 BLU
B
0.5 LT GRN
0.5 LT BLU
0.5 GRN/RED
0.5 GRN/RED
0.5 BRN
1
B-520 J/C 10P ADD 4
2
17 H-81
0.5 LT BLU
0.5 VIO
3 H-32
3 H-31
4 H-82
0.5 LT BLU
0.5 LT BLU
0.5 BRN
0.5 GRN
0.5 GRN/RED
0.5 GRN/RED
0.85 GRN/RED
3 H-101
Transmission Control Module
Flasher Unit
Hazard Switch
Side Marker RH
Side Marker LH
Marker Light Relay
Cornering Light Relay
Fan Control Switch
0.5 GRN
2 H-66
0.5 GRN
Rear Combination Light RH/LH Licence Plate Light
LNWH80XF001601

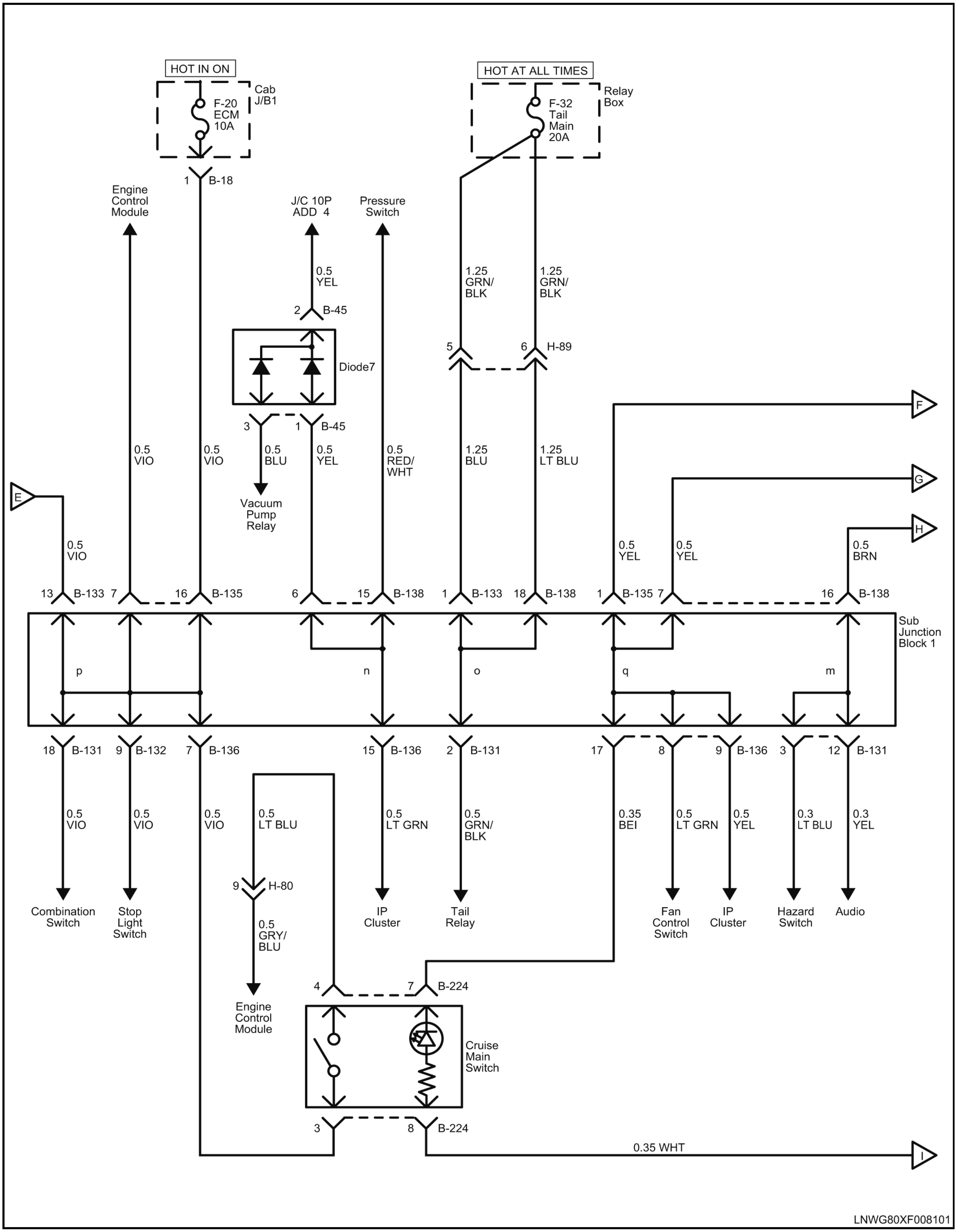
4645781


HOT AT ALL TIMES
TCM Relay
F-22 ECU (Batt) 10A
Cab J/B1
2 B-232
3 B-22
Front Turn Light RH
Front Door Lock Motor LH
Door Lock Relay
DRL Control Unit
0.5 LT GRN
0.5 GRN/BLK
1 H-92
0.5 LT BLU
0.5 BLU
0.5 BLK/BLU
9 H-91
0.5 BLK/WHT
7 H-91
0.5 LT BLU
0.5 LT GRN
0.85 BLK/BLU
C
D
0.35 RED
0.35 WHT
10
14
4 B-134
5 B-138
6 B-133
17 B-135
16 B-131
10 B-136
Sub Junction Block 1
f
g
i
h
11 B-131
11 B-132
16 B-136
8 B-135
16 B-132
8 B-132
9 B-135
8 B-133
2
9 B-133
0.5 VIO
3 H-81
0.5 GRN/WHT
2 H-101
0.5 GRN/WHT
8 H-66
0.5 GRN/WHT
0.5 GRN/WHT
2 H-32
0.5 GRN/WHT
0.5 LT GRN
0.5 VIO
0.5 BLU/WHT
13 H-84
0.5 BLU/WHT
1 B-443
Diode Door Lock
2 B-443
0.5 BRN
4
B-518 J/C 10P ADD2
7
0.5 BRN
0.5 BRN
0.5 BRN
0.5 LT BLU
0.5 VIO
0.5 BLK/BLU
Flasher Unit
Side Turn Light RH
IP Cluster
Rear Combination Light RH
Keyless Entry C/U
IP Cluster
IP Cluster
Mimamori
Transmission Control Module
RS232C Ch1
LNWH80XF001101

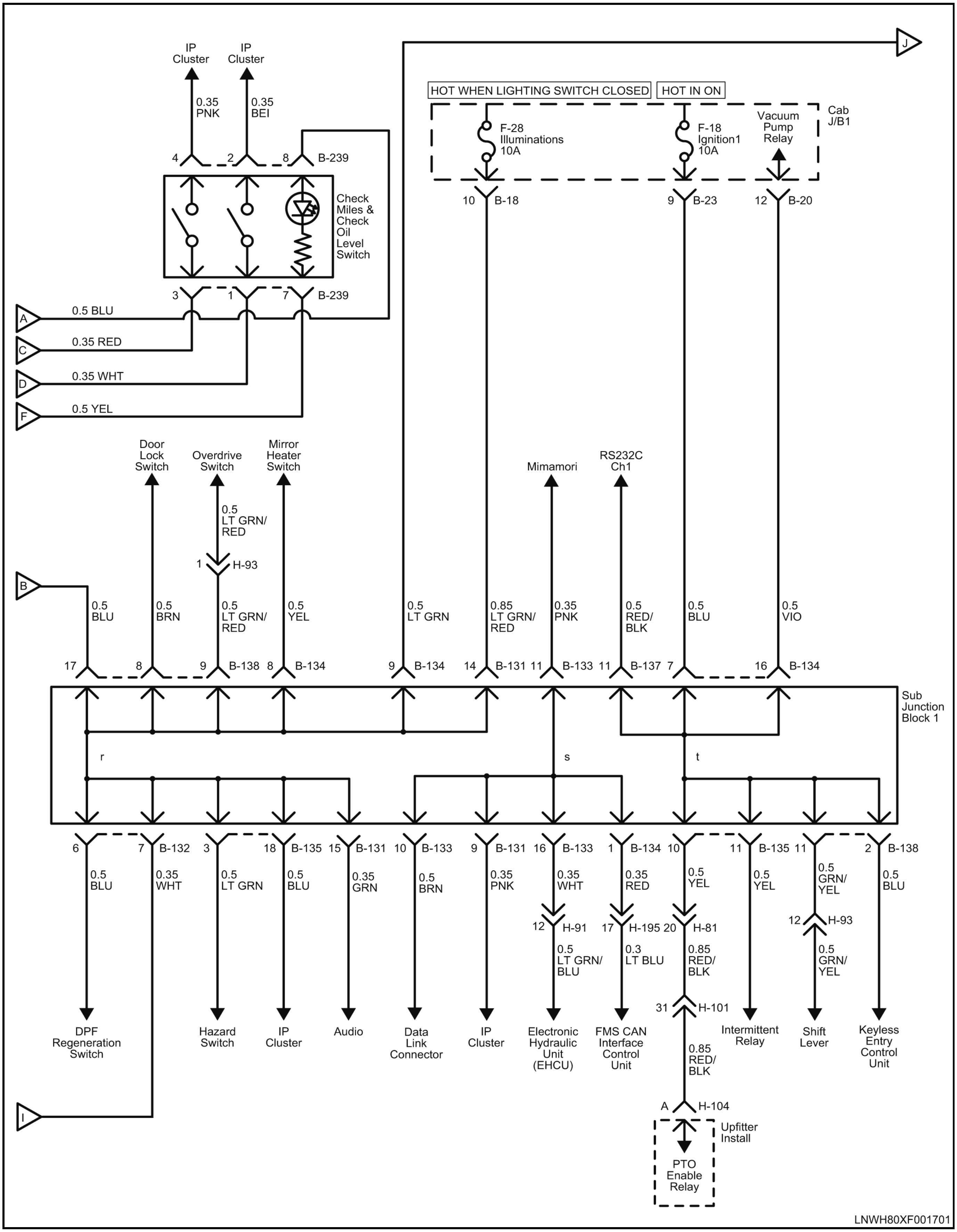
4645797


DRL Control Unit
Transmission Control Module
Data Link Connector
Electronic Hydraulic Control Unit (EHCU)
0.5 BLK/ WHT
0.5 WHT/ BLU
0.35 BEI
0.5 LT GRN
1
H-91
0.35 WHT
0.5 VIO
E
16
1
2
4
B-137
4
B-133
Sub Junction Block 1
k
l
j
10
B-131
10
B-132
13
B-136
13
B-131
4
B-132
0.5 LT BLU
12
H-80
0.5 WHT/ BLU
0.85 WHT/ BLU
16
H-52
0.5 WHT/ BLU
0.5 LT GRN
0.35 RED
0.5 LT GRN
0.5 BRN
Generator
IP Cluster
IP Cluster
DPF Regeneration Switch
Wiper & Exhaust Brake Switch
LNWG80XF008001

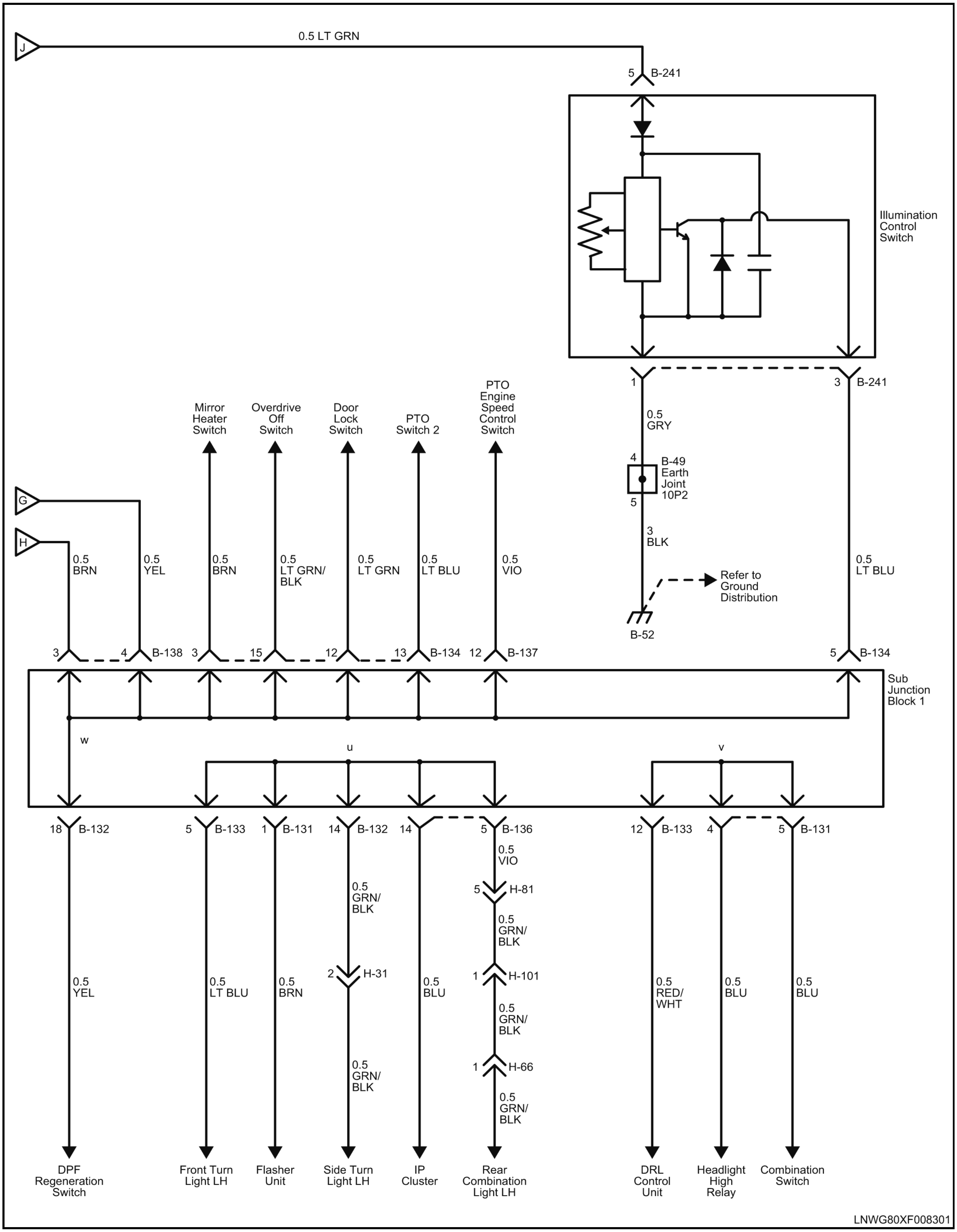
4497072


HOT IN ON
F-20
ECM
10A
Cab
J/B1
HOT AT ALL TIMES
F-32
Tail
Main
20A
Relay
Box
1 B-18
Engine
Control
Module
J/C 10P
ADD 4
Pressure
Switch
0.5
YEL
2 B-45
Diode7
1.25
GRN/
BLK
1.25
GRN/
BLK
5
6 H-89
3
1 B-45
0.5
VIO
0.5
VIO
0.5
BLU
0.5
YEL
0.5
RED/
WHT
1.25
BLU
1.25
LT BLU
Vacuum
Pump
Relay
F
G
H
E
0.5
VIO
0.5
YEL
0.5
YEL
0.5
BRN
13 B-133 7
16 B-135
6
15 B-138
1 B-133
18 B-138
1 B-135 7
16 B-138
Sub
Junction
Block 1
p
n
o
q
m
18 B-131
9 B-132
7 B-136
15 B-136
2 B-131
17
8
9 B-136
3
12 B-131
0.5
VIO
0.5
VIO
0.5
VIO
0.5
LT BLU
0.5
LT GRN
0.5
GRN/
BLK
0.35
BEI
0.5
LT GRN
0.5
YEL
0.3
LT BLU
0.3
YEL
9 H-80
Combination
Switch
Stop
Light
Switch
IP
Cluster
Tail
Relay
Fan
Control
Switch
IP
Cluster
Hazard
Switch
Audio
0.5
GRY/
BLU
Engine
Control
Module
4
7 B-224
Cruise
Main
Switch
3
8 B-224
0.35 WHT
I
LNWG80XF008101

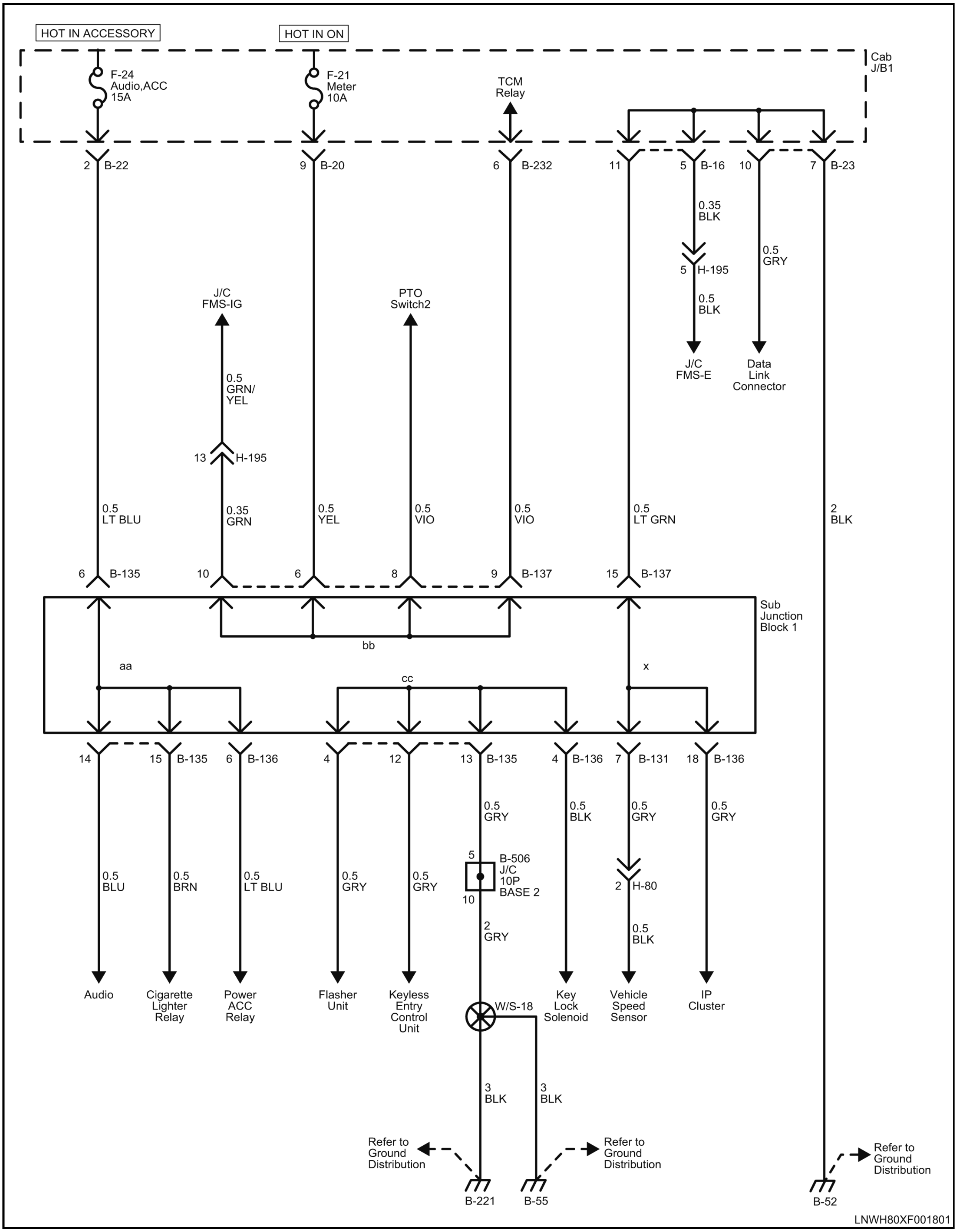
4497074


IP Cluster
IP Cluster
0.35 PNK
0.35 BEI
4
2
8
B-239
Check Miles & Check Oil Level Switch
3
1
7
B-239
A
0.5 BLU
C
0.35 RED
D
0.35 WHT
F
0.5 YEL
J
HOT WHEN LIGHTING SWITCH CLOSED
HOT IN ON
Cab J/B1
F-28 Illuminations 10A
F-18 Ignition1 10A
Vacuum Pump Relay
10
B-18
9
B-23
12
B-20
Door Lock Switch
Overdrive Switch
Mirror Heater Switch
Mimamori
RS232C Ch1
0.5 LT GRN/ RED
1
H-93
B
0.5 BLU
0.5 BRN
0.5 LT GRN/ RED
0.5 YEL
0.5 LT GRN
0.85 LT GRN/ RED
0.35 PNK
0.5 RED/ BLK
0.5 BLU
0.5 VIO
17
8
9
B-138
8
B-134
9
B-134
14
B-131
11
B-133
11
B-137
7
16
B-134
Sub Junction Block 1
r
s
t
6
7
B-132
3
18
B-135
15
B-131
10
B-133
9
B-131
16
B-133
1
B-134
10
11
B-135
11
2
B-138
0.5 BLU
0.35 WHT
0.5 LT GRN
0.5 BLU
0.35 GRN
0.5 BRN
0.35 PNK
0.35 WHT
0.35 RED
0.5 YEL
0.5 YEL
0.5 GRN/ YEL
0.5 BLU
12
H-91
17
H-195
20
H-81
12
H-93
0.5 LT GRN/ BLU
0.3 LT BLU
0.85 RED/ BLK
0.5 GRN/ YEL
31
H-101
DPF Regeneration Switch
Hazard Switch
IP Cluster
Audio
Data Link Connector
IP Cluster
Electronic Hydraulic Unit (EHCU)
FMS CAN Interface Control Unit
Intermittent Relay
Shift Lever
Keyless Entry Control Unit
0.85 RED/ BLK
A
H-104
Upfitter Install
PTO Enable Relay
I
LNWH80XF001701

4645805

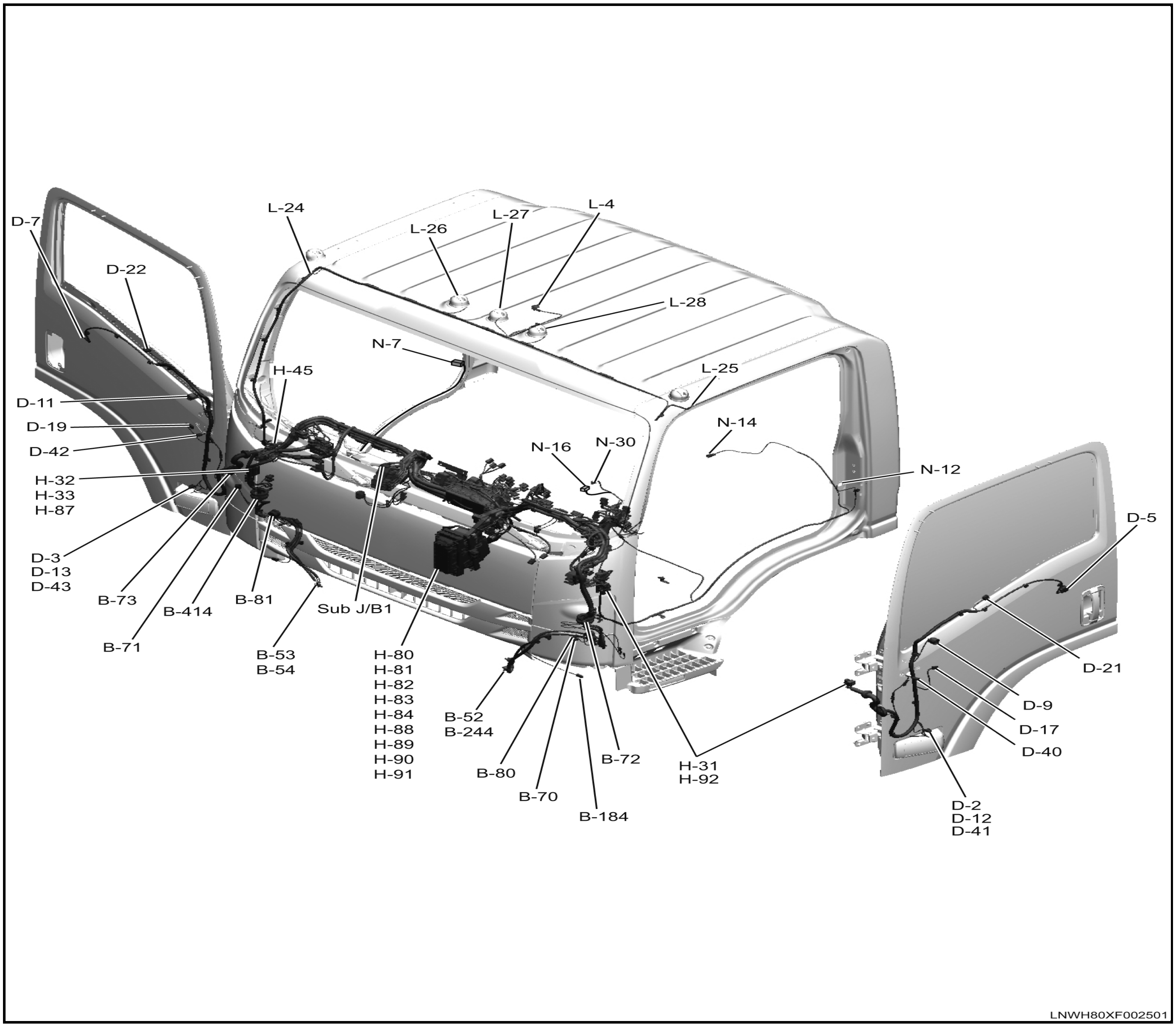

J
0.5 LT GRN
5 B-241
Illumination Control Switch
1
3 B-241
0.5 GRY
4
B-49 Earth Joint 10P2
5
3 BLK
Refer to Ground Distribution
B-52
0.5 LT BLU
G
H
0.5 BRN
0.5 YEL
Mirror Heater Switch
0.5 BRN
Overdrive Off Switch
0.5 LT GRN/ BLK
Door Lock Switch
0.5 LT GRN
PTO Switch 2
0.5 LT BLU
PTO Engine Speed Control Switch
0.5 VIO
3
4 B-138
3
15
12
13 B-134
12 B-137
5 B-134
Sub Junction Block 1
w
u
v
18 B-132
5 B-133
1 B-131
14 B-132
14
5 B-136
12 B-133
4
5 B-131
0.5 VIO
5 H-81
0.5 GRN/ BLK
2 H-31
1 H-101
1 H-66
0.5 YEL
0.5 LT BLU
0.5 BRN
0.5 BLU
0.5 RED/ WHT
0.5 BLU
0.5 BLU
DPF Regeneration Switch
Front Turn Light LH
Flasher Unit
Side Turn Light LH
IP Cluster
Rear Combination Light LH
DRL Control Unit
Headlight High Relay
Combination Switch
LNWG80XF008301

4497093


HOT IN ACCESSORY
HOT IN ON
Cab J/B1
F-24 Audio,ACC 15A
F-21 Meter 10A
TCM Relay
2 B-22
9 B-20
6 B-232
11
5 B-16
10
7 B-23
0.35 BLK
5 H-195
0.5 BLK
0.5 GRY
J/C FMS-E
Data Link Connector
J/C FMS-IG
PTO Switch2
0.5 GRN/ YEL
13 H-195
0.5 LT BLU
0.35 GRN
0.5 YEL
0.5 VIO
0.5 VIO
0.5 LT GRN
2 BLK
6 B-135
10
6
8
9 B-137
15 B-137
Sub Junction Block 1
bb
aa
cc
x
14
15 B-135
6 B-136
4
12
13 B-135
4 B-136
7 B-131
18 B-136
0.5 GRY
0.5 BLK
0.5 GRY
0.5 GRY
0.5 BLU
0.5 BRN
0.5 LT BLU
0.5 GRY
0.5 GRY
5
B-506 J/C 10P BASE 2
10
2 H-80
0.5 BLK
2 GRY
Audio
Cigarette Lighter Relay
Power ACC Relay
Flasher Unit
Keyless Entry Control Unit
W/S-18
Key Lock Solenoid
Vehicle Speed Sensor
IP Cluster
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
B-52
LNWH80XF001801

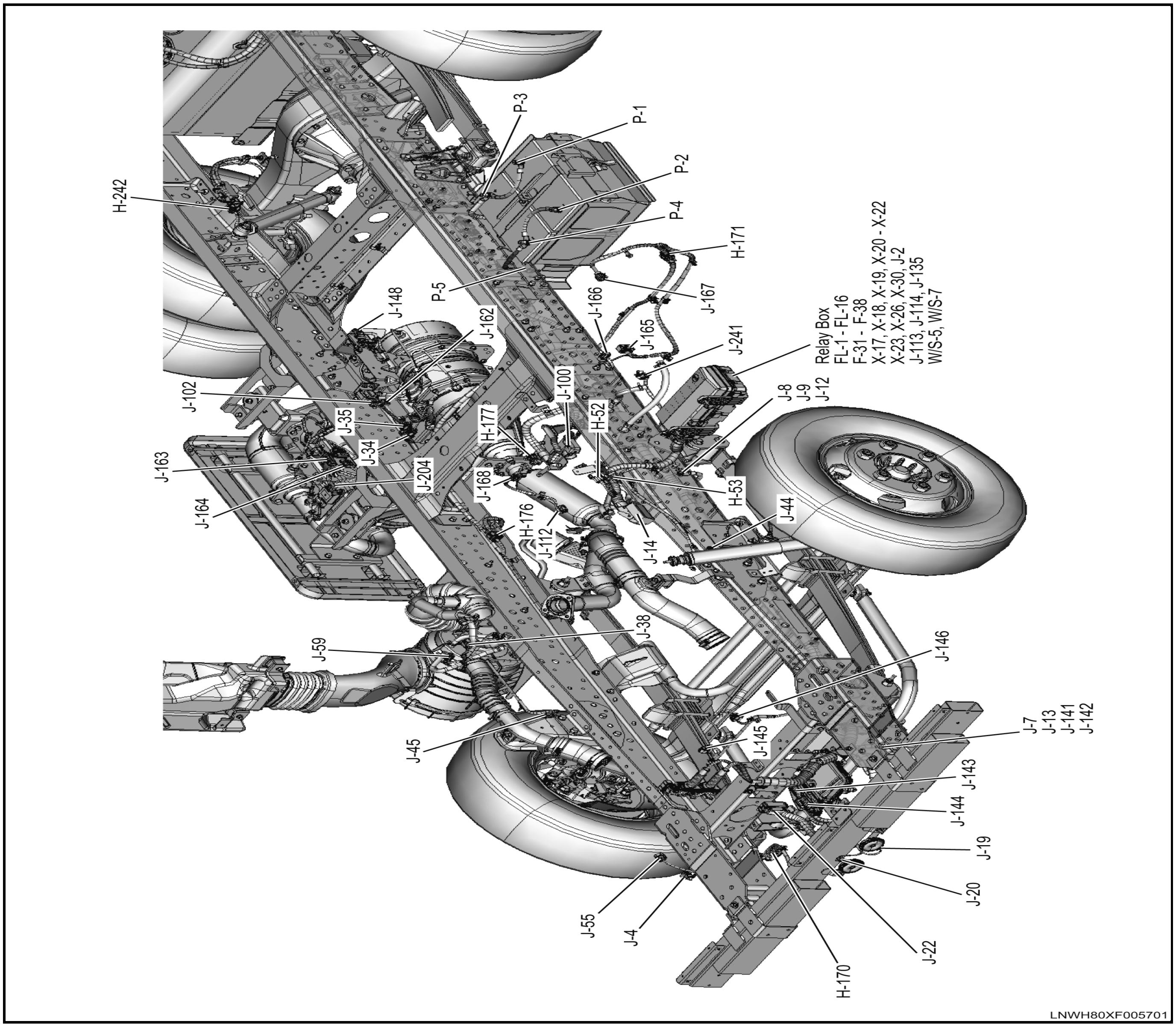
4645809

Harness Routing Views (Cab Harness Routing)


D-7
L-24
D-22
L-26
L-27
L-4
L-28
N-7
H-45
L-25
D-11
N-14
D-19
N-16
N-30
D-42
N-12
H-32
H-33
H-87
D-5
D-3
D-13
D-43
B-73
B-414
B-81
Sub J/B1
D-21
B-71
B-53
B-54
H-80
H-81
H-82
H-83
H-84
H-88
H-89
H-90
H-91
B-52
B-244
D-9
D-17
D-40
B-72
H-31
H-92
B-80
B-70
B-184
D-2
D-12
D-41
LNWH80XF002501

4645208

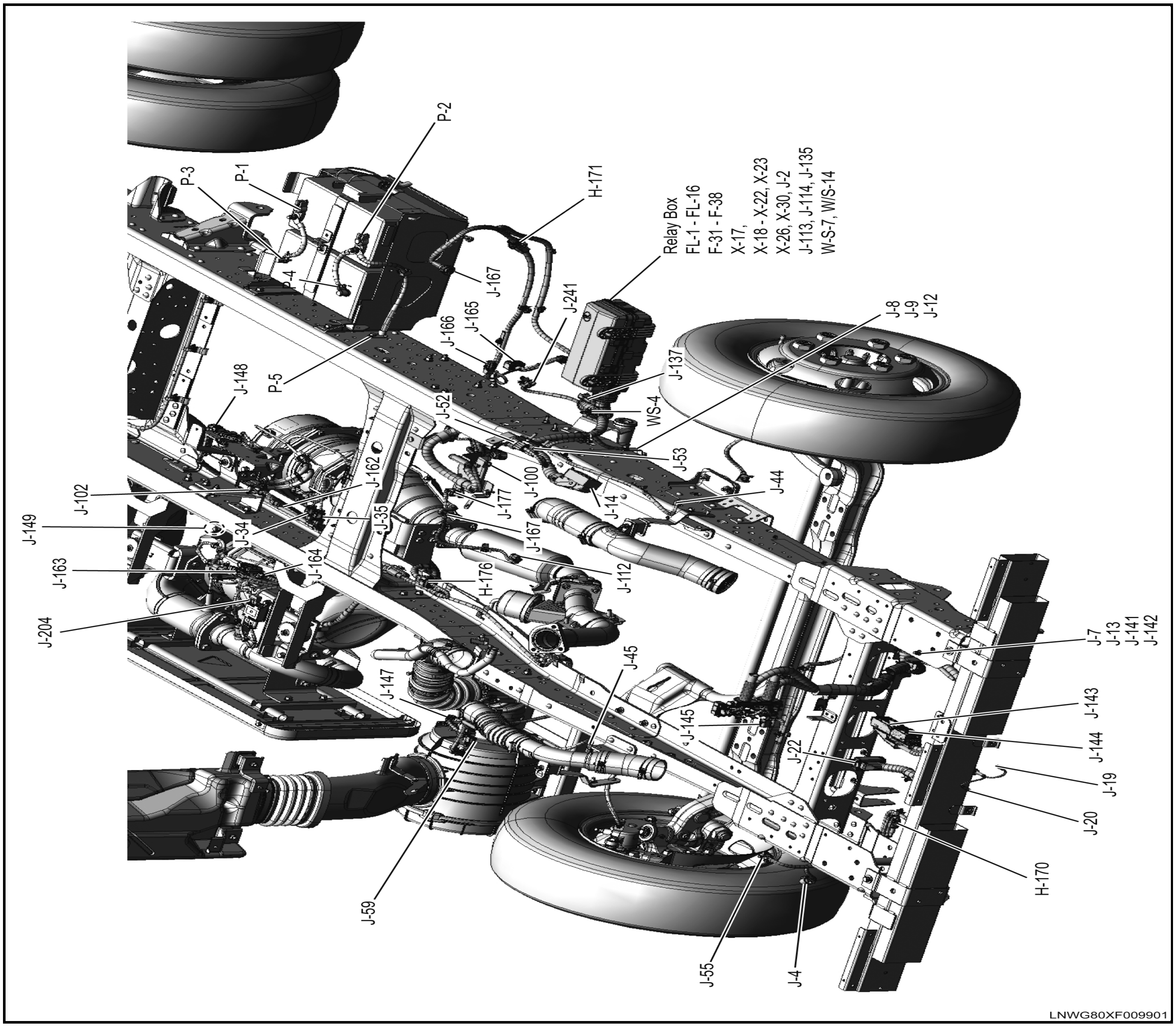
Harness Routing Views (Frame Harness Routing)


H-242
P-3
P-1
P-2
P-4
P-5
H-171
J-167
J-166
J-165
J-148
J-162
J-241
Relay Box
FL-1 - FL-16
F-31 - F-38
X-17, X-18, X-19, X-20 - X-22
X-23, X-26, X-30, J-2
J-113, J-114, J-135
W/S-5, W/S-7
J-102
J-35
J-34
J-100
H-177
H-52
J-8
J-9
J-12
J-163
J-204
J-168
H-53
J-164
H-176
J-112
J-14
J-44
J-38
J-59
J-146
J-45
J-145
J-7
J-13
J-141
J-142
J-143
J-144
J-19
J-20
J-55
J-4
H-170
J-22

LNWH80XF005701

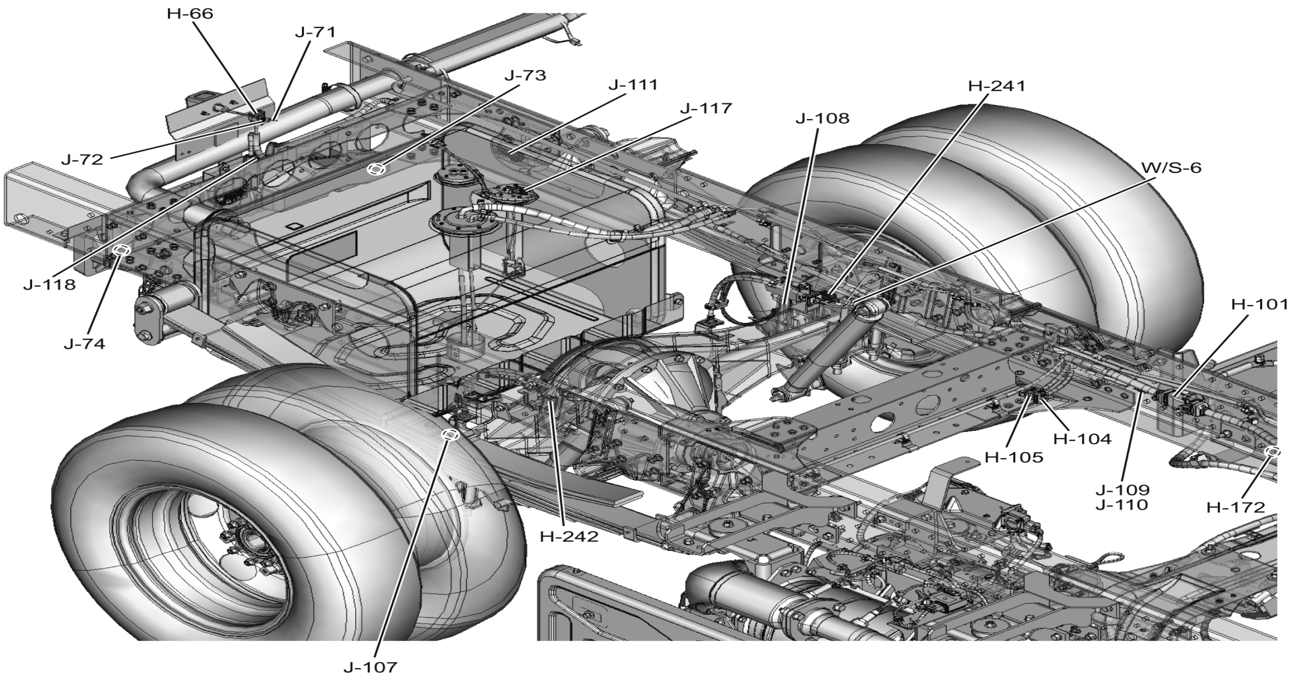
4645257

Harness Routing Views (Frame Harness Routing (2 of 2))


P-3
P-1
P-2
H-171
Relay Box
FL-1 - FL-16
F-31 - F-38
X-17,
X-18 - X-22, X-23
X-26, X-30, J-2
J-113, J-114, J-135
W-S-7, W/S-14
P-4
J-167
J-241
J-166
J-165
J-8
J-9
J-12
J-137
J-148
P-5
WS-4
J-52
J-53
J-102
J-162
J-100
J-44
J-177
J-14
J-149
J-34
J-35
J-167
J-163
J-164
H-176
J-112
J-204
J-45
J-7
J-13
J-141
J-142
J-147
J-145
J-143
J-22
J-144
J-19
J-20
H-170
J-59
J-55
J-4
LNWG80XF009901

4496091

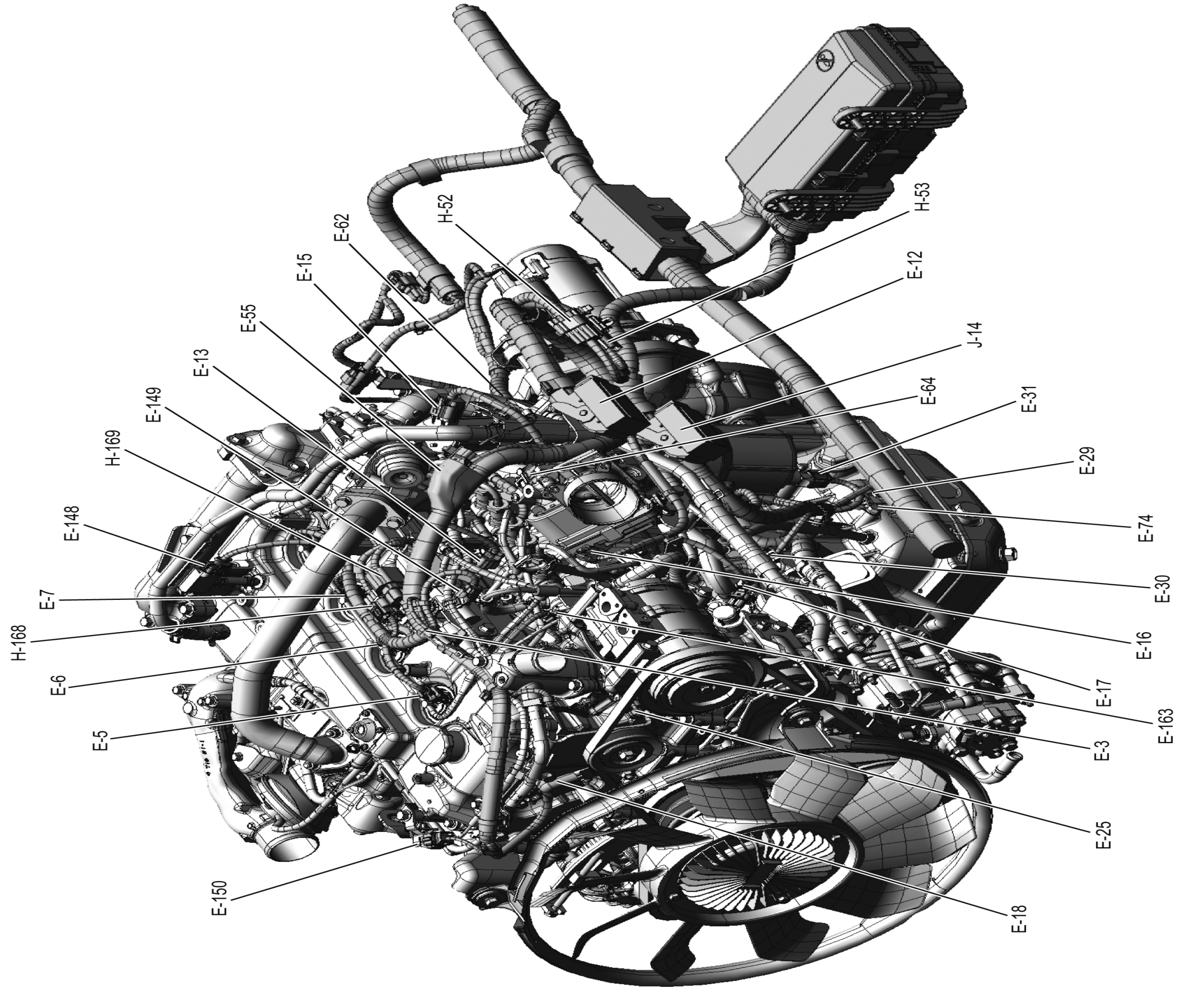
Harness Routing Views (Frame Harness Routing (3 of 3))


H-66
J-71
J-73
J-111
J-117
H-241
J-108
W/S-6
J-72
J-118
J-74
H-101
H-104
H-105
J-109
J-110
H-172
H-242
J-107

LNWH80XF005501

4645280

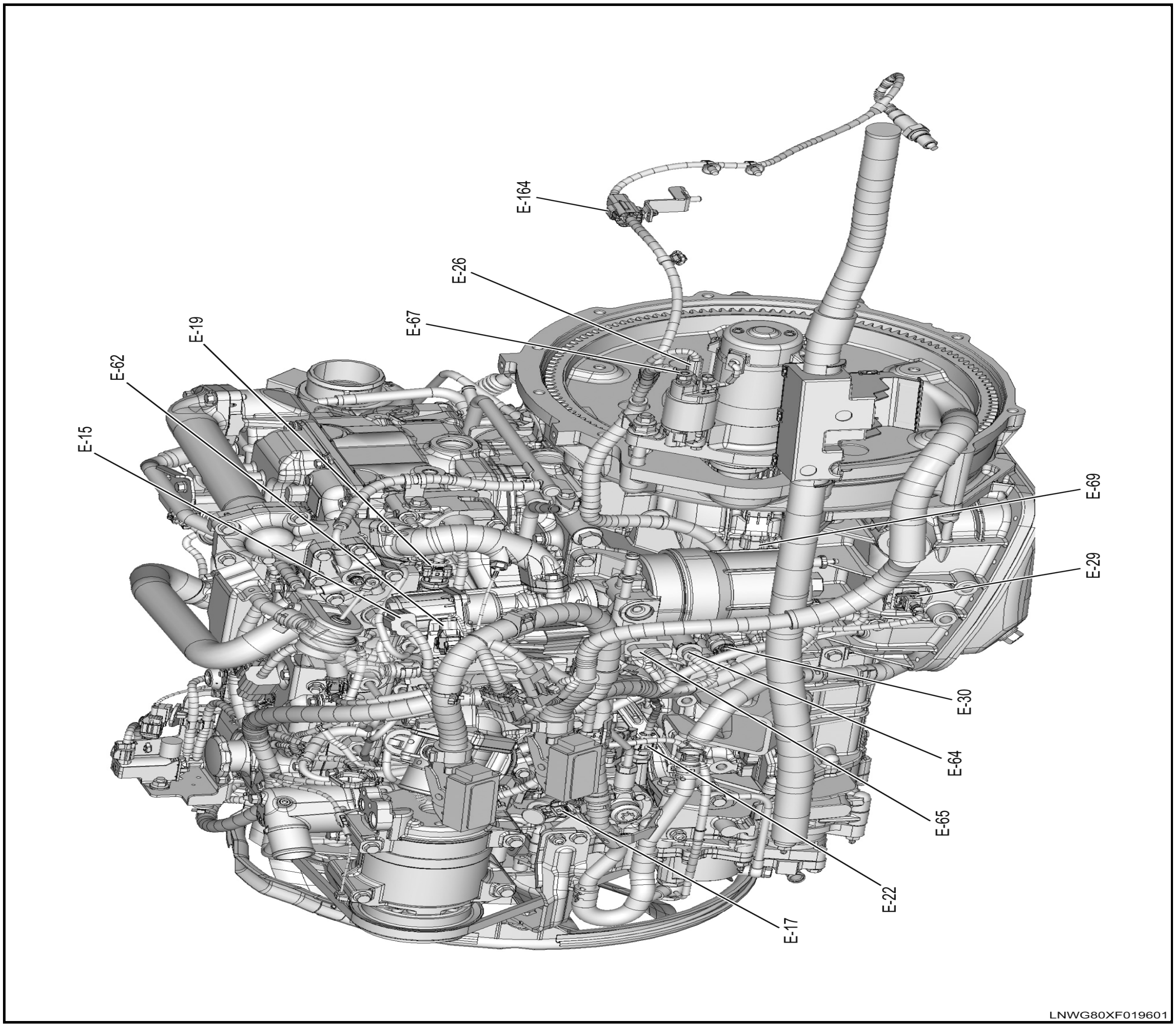
Harness Routing Views (Engine Harness Routing (1 of 4))


H-52
E-62
E-15
E-55
E-13
E-149
H-169
E-148
E-7
H-168
E-6
E-5
E-150
H-53
E-12
J-14
E-64
E-31
E-29
E-74
E-30
E-16
E-17
E-163
E-3
E-25
E-18

LNWF80XF007701

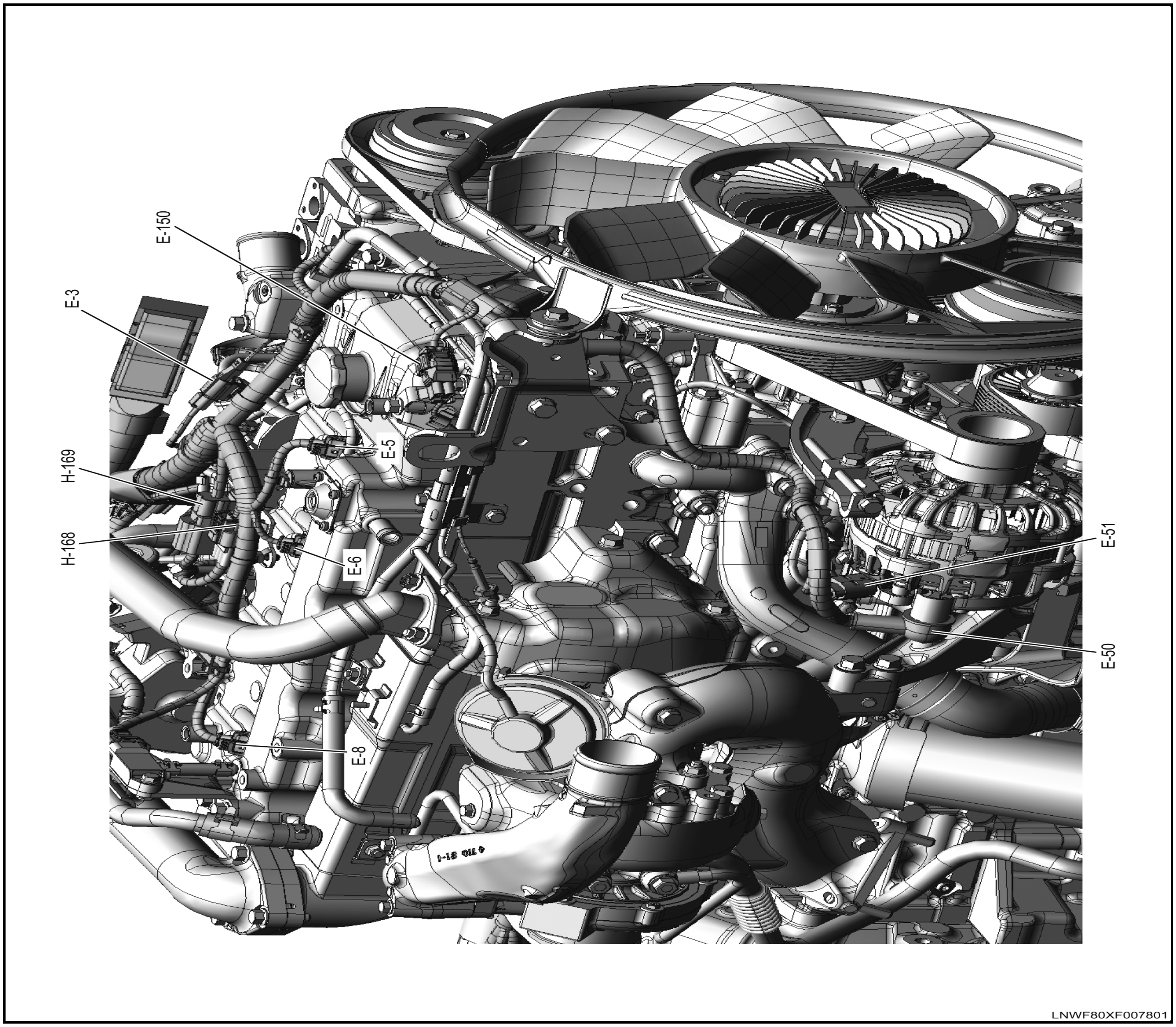
4496100

Harness Routing Views (Engine Harness Routing (2 of 4))


E-164
E-26
E-67
E-19
E-62
E-15
E-69
E-29
E-30
E-64
E-65
E-22
E-17
LNWG80XF019601

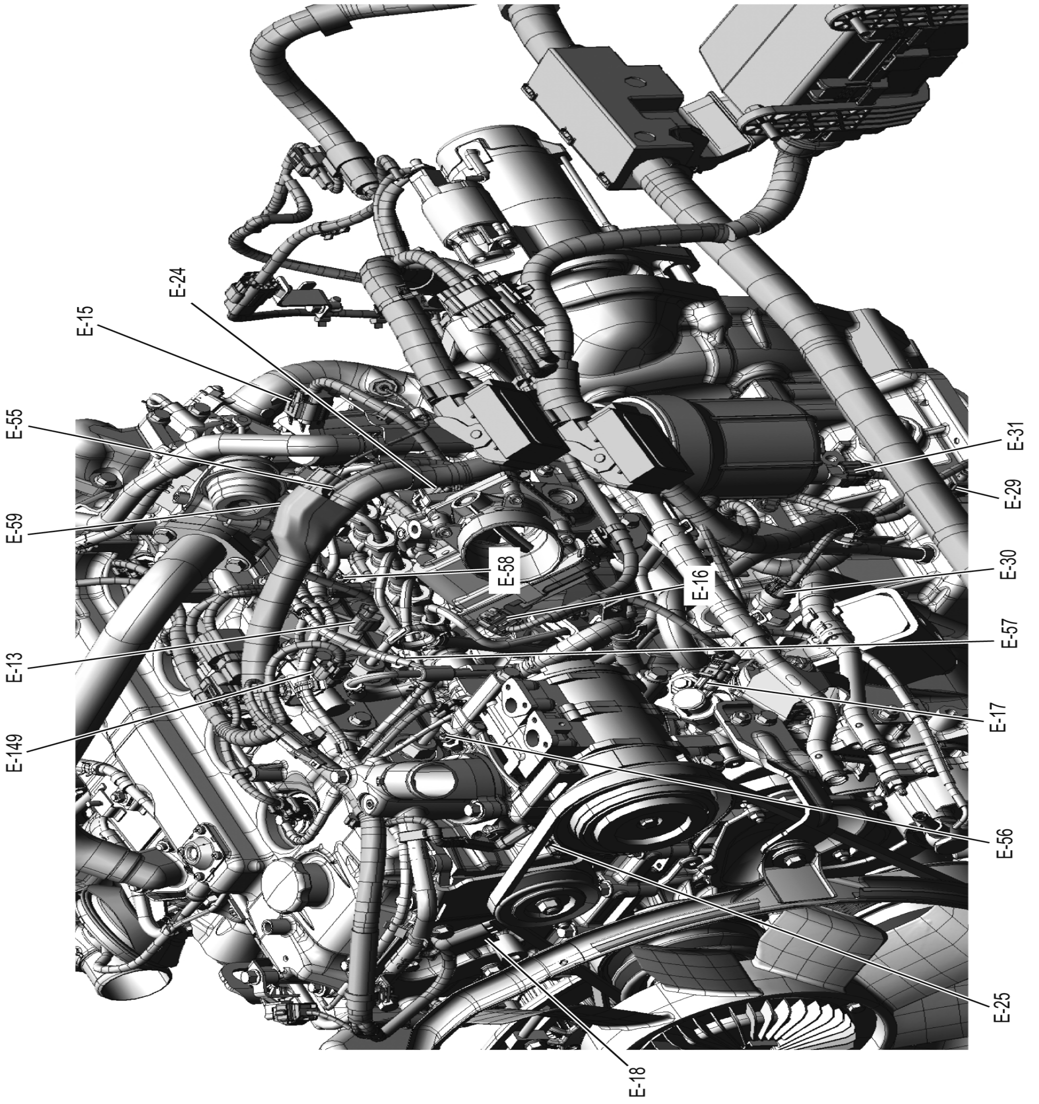
4496104

Harness Routing Views (Engine Harness Routing (3 of 4))


E-150
E-3
E-5
H-169
H-168
E-6
E-8
E-51
E-50
LNWF80XF007801

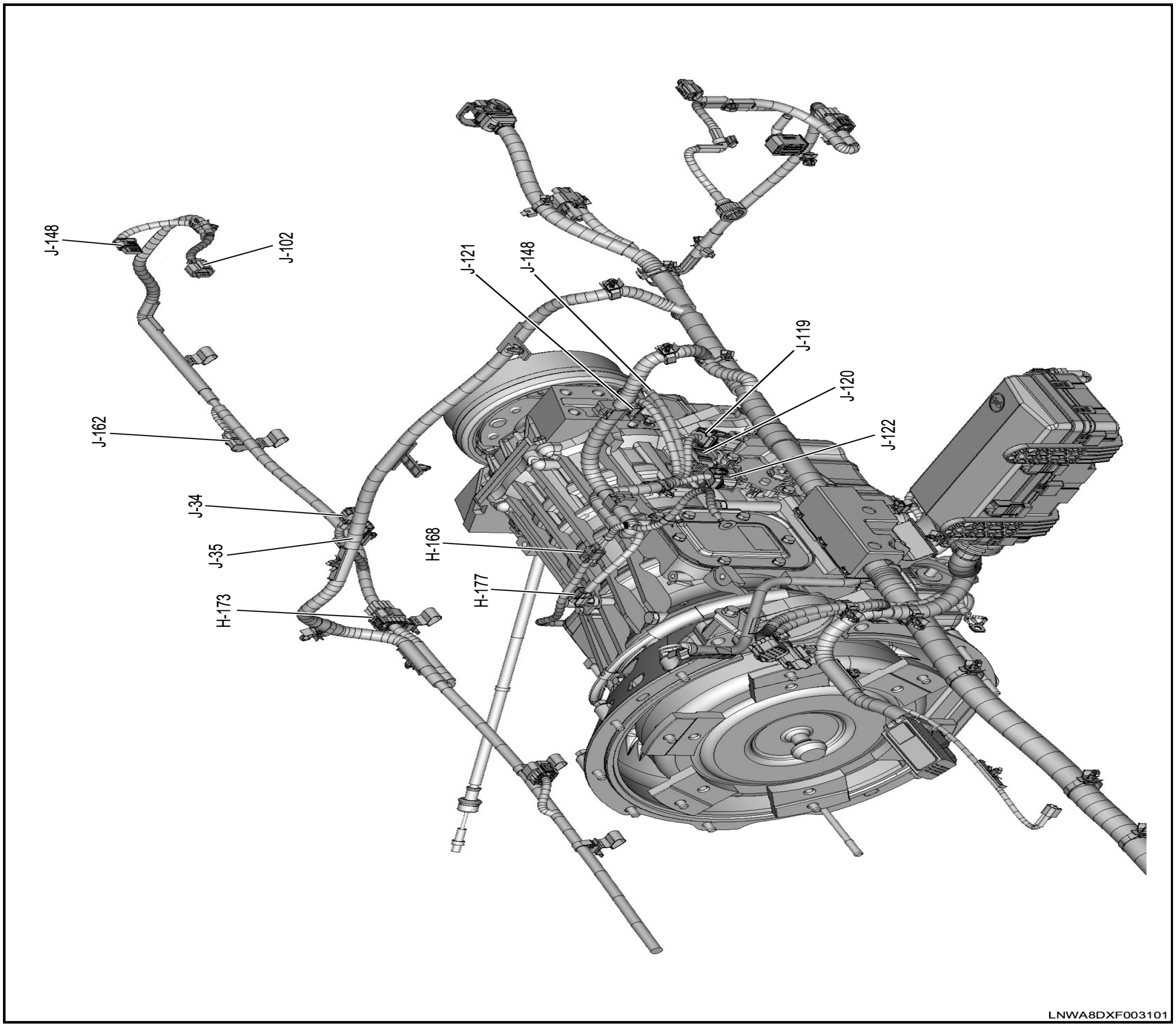
4496108

Harness Routing Views (Engine Harness Routing (4 of 4))


E-24
E-15
E-55
E-59
E-58
E-16
E-13
E-149
E-31
E-29
E-30
E-57
E-17
E-56
E-25
E-18
LNWF80XF007901

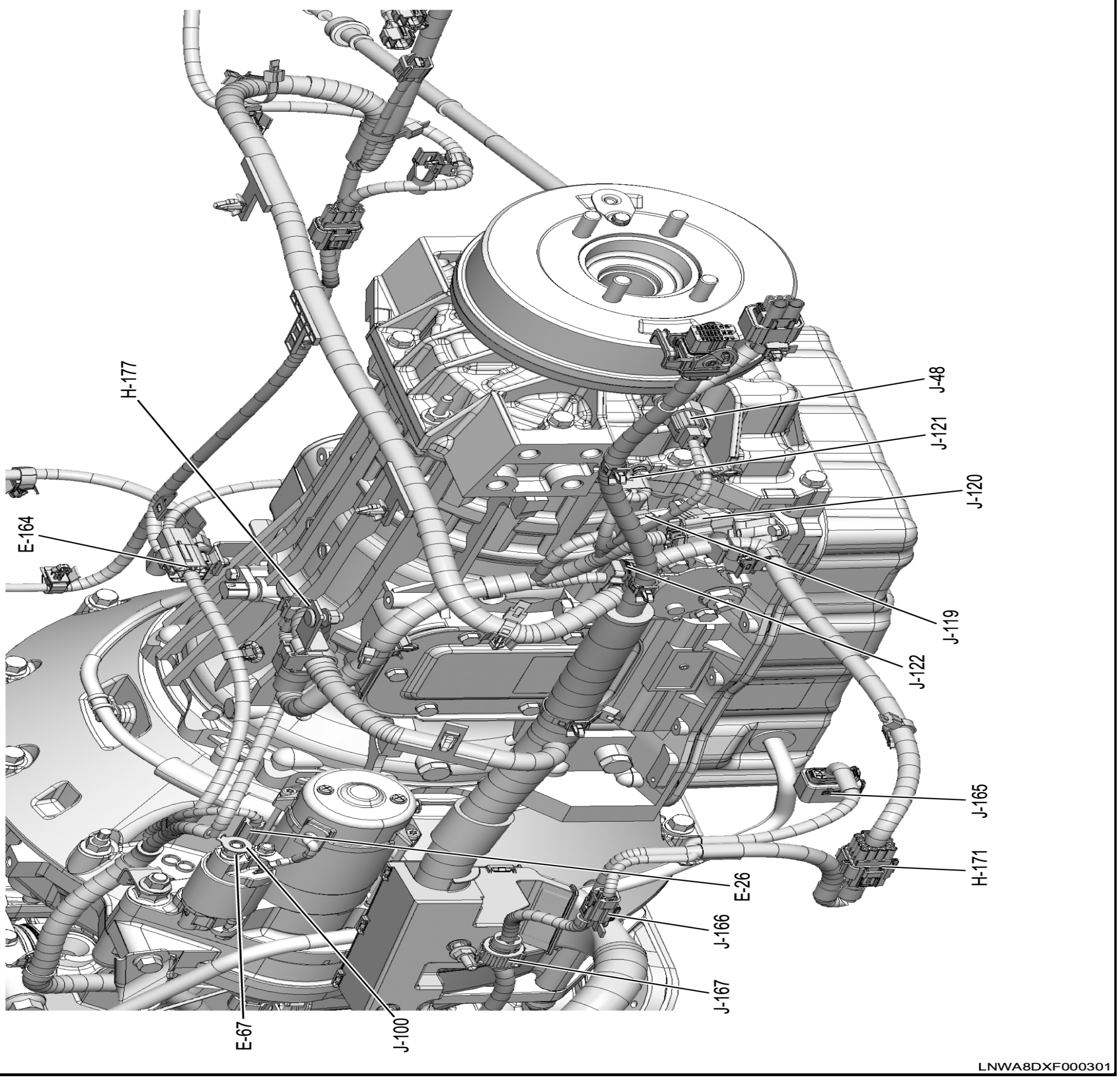
4496112

Harness Routing Views (Transmission Harness Routing (1 of 3))


J-148
J-102
J-121
J-148
J-119
J-120
J-122
J-162
J-34
J-35
H-168
H-177
H-173
LNWA8DXF003101

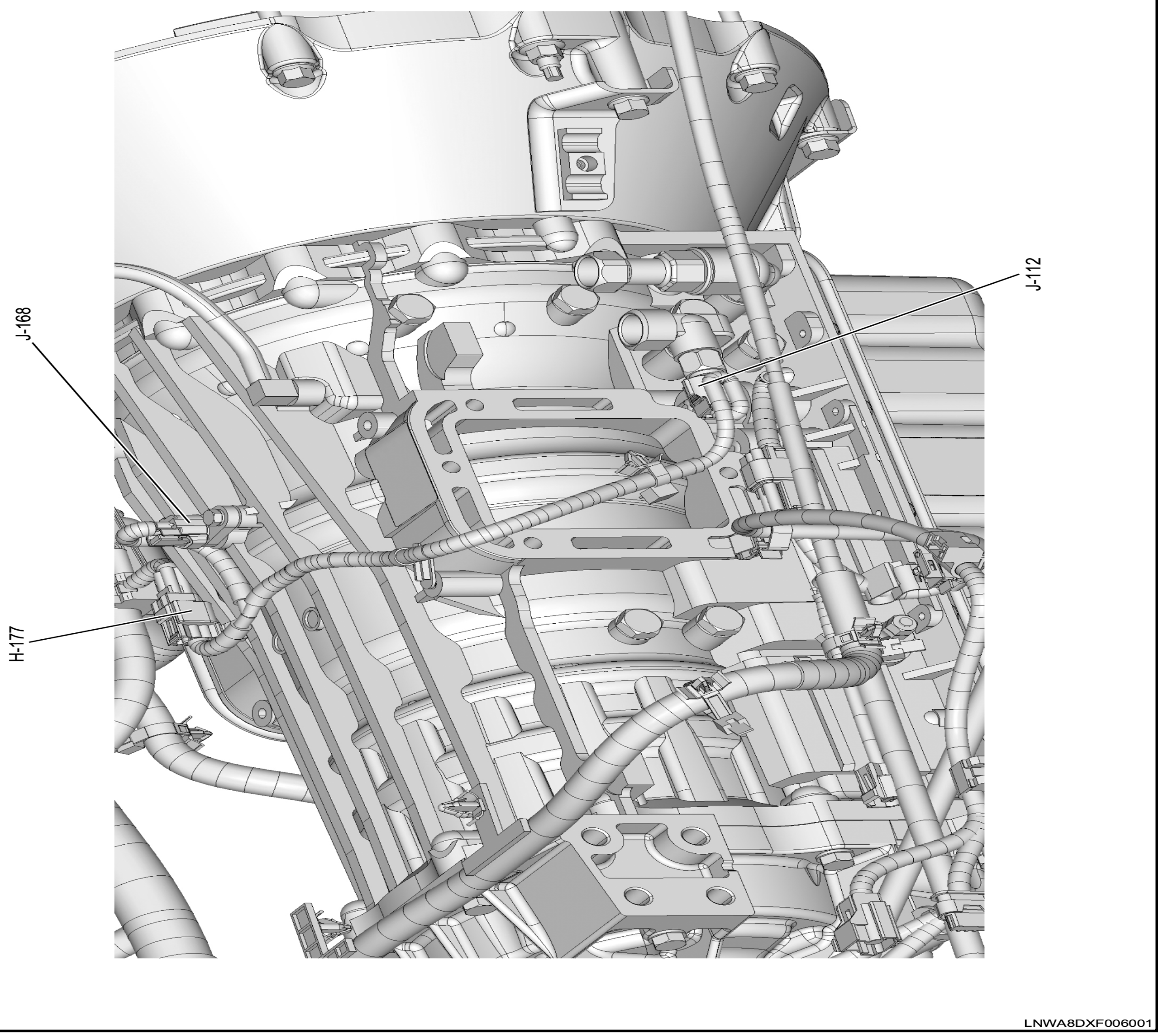
4496117

Harness Routing Views (Transmission Harness Routing (2 of 3))


H-177
E-164
J-48
J-121
J-120
J-119
J-122
J-165
H-171
E-26
J-166
J-167
E-67
J-100
LNWA8DXF000301

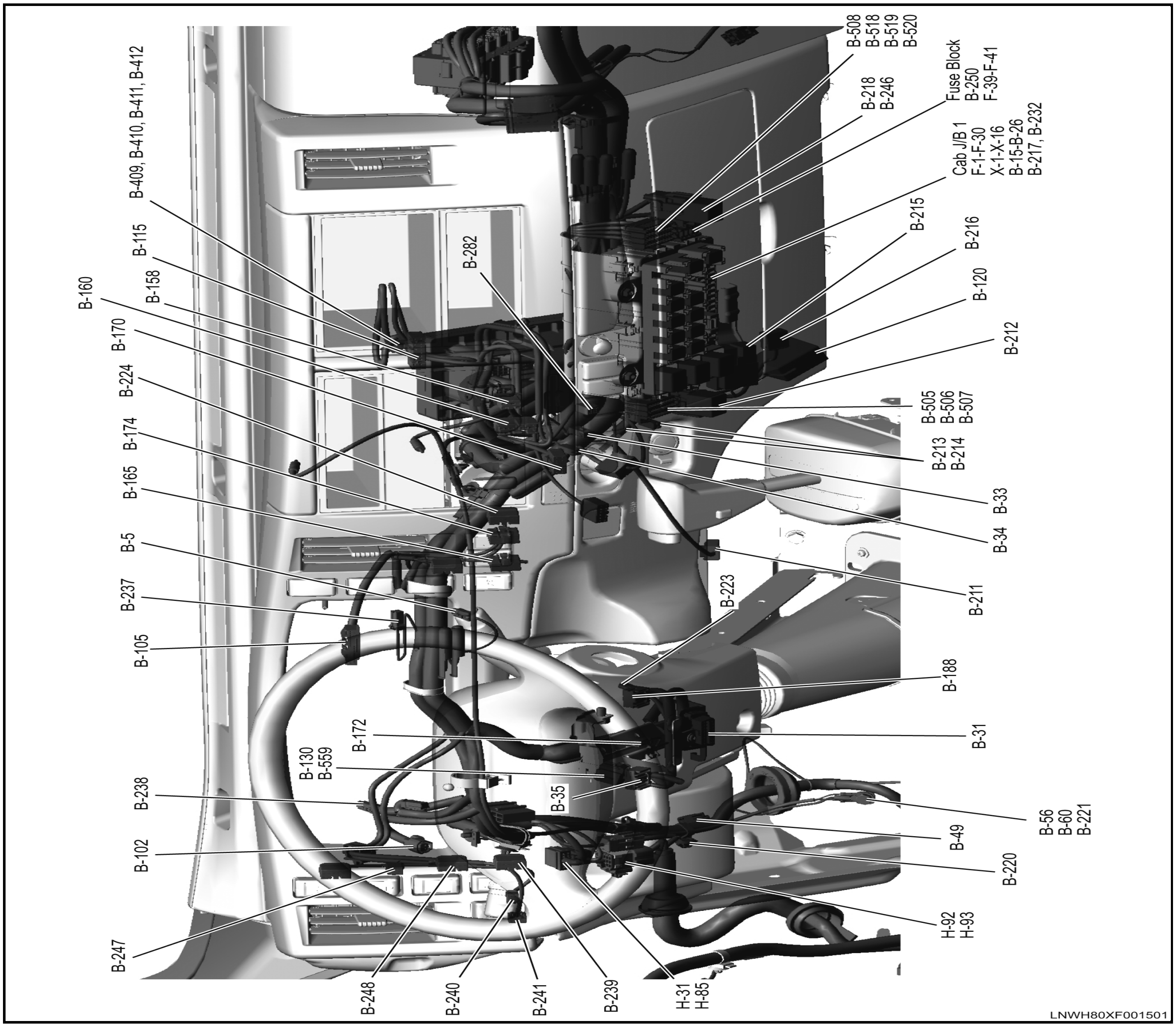
4496120

Harness Routing Views (Transmission Harness Routing (3 of 3))


J-168
H-177
J-112
LNWA8DXF006001

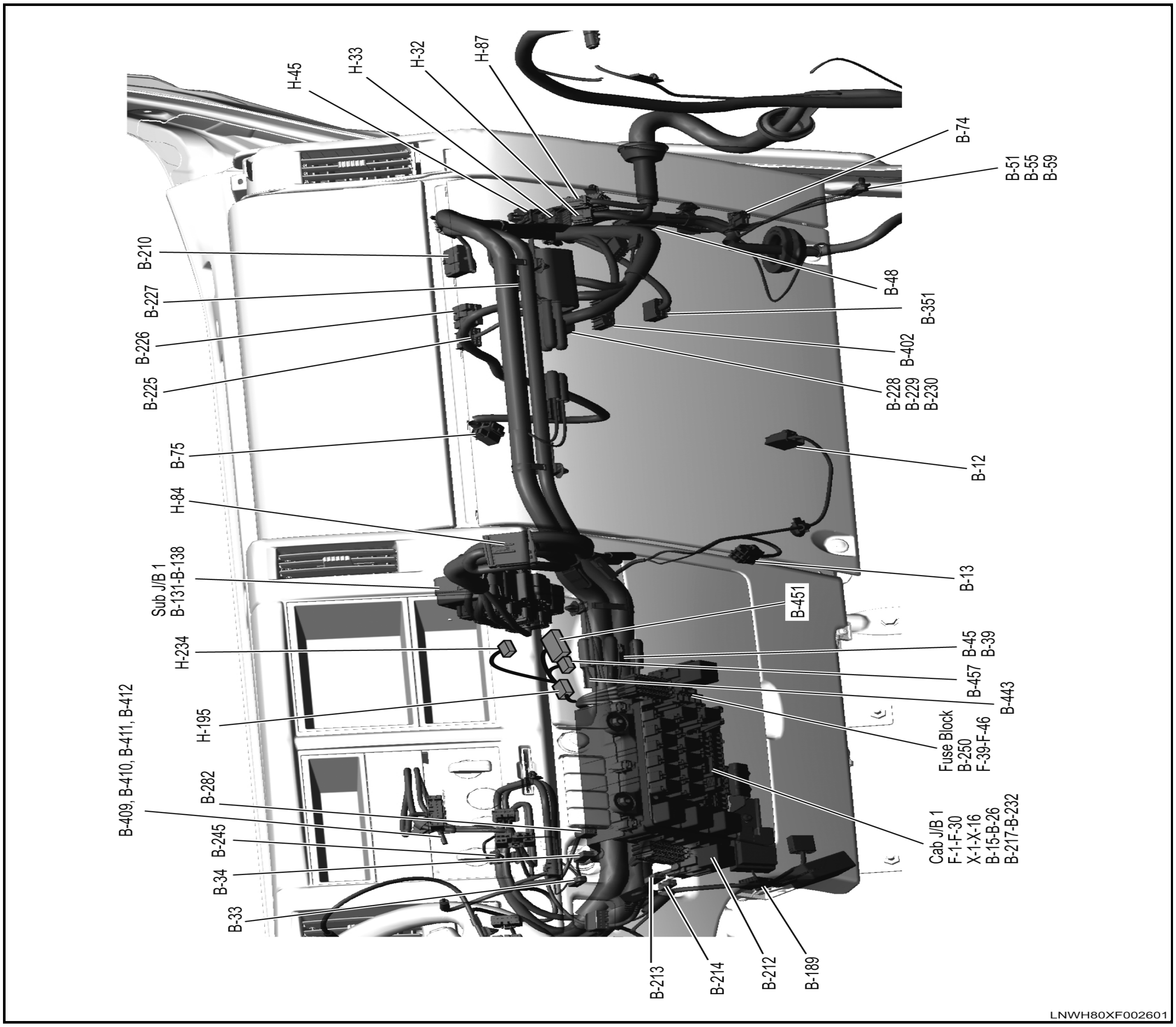
4496124

Harness Routing Views (Instrument Panel Harness Routing (1 of 2))


B-409, B-410, B-411, B-412
B-115
B-160
B-158
B-170
B-224
B-174
B-165
B-5
B-237
B-105
B-238
B-102
B-247
B-282
B-172
B-130
B-559
B-35
B-248
B-240
B-241
B-239
H-31
H-85
B-508
B-518
B-519
B-520
B-218
B-246
Fuse Block
B-250
F-39-F-41
Cab J/B 1
F-1-F-30
X-1-X-16
B-15-B-26
B-217, B-232
B-215
B-216
B-120
B-212
B-505
B-506
B-507
B-213
B-214
B-33
B-34
B-211
B-223
B-188
B-31
B-56
B-60
B-221
B-49
B-220
H-92
H-93
LNWH80XF001501

4645299

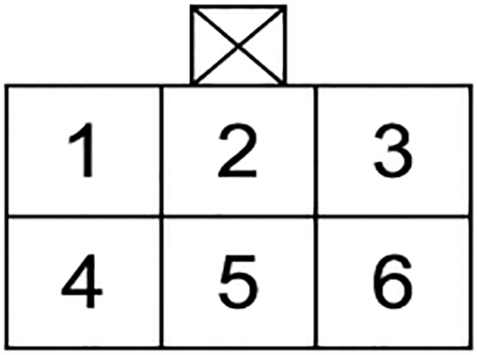
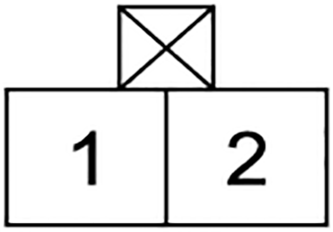
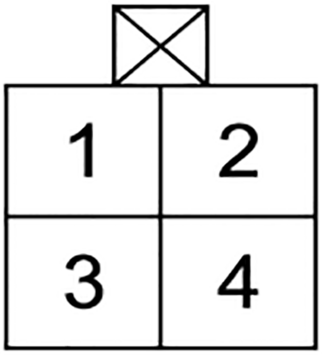
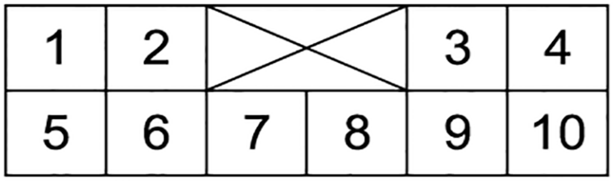
Harness Routing Views (Instrument Panel Harness Routing (2 of 2))

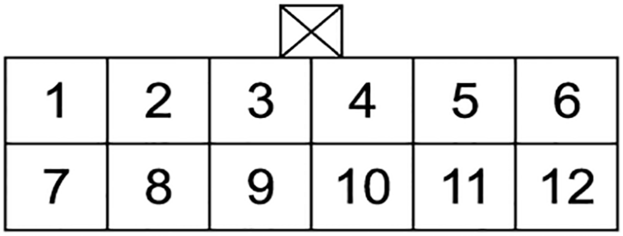
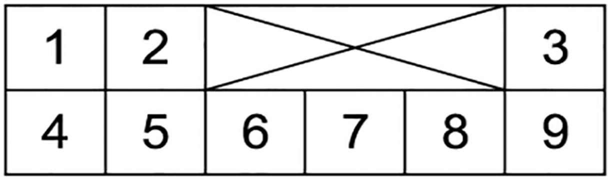

H-45
H-33
H-32
H-87
B-74
B-51
B-55
B-59
B-210
B-227
B-226
B-225
B-48
B-351
B-402
B-228
B-229
B-230
B-75
B-12
H-84
Sub J/B 1
B-131-B-138
B-13
B-451
H-234
B-45
B-39
B-457
B-443
H-195
B-409, B-410, B-411, B-412
Fuse Block
B-250
F-39-F-46
B-282
B-245
B-34
B-33
Cab J/B 1
F-1-F-30
X-1-X-16
B-15-B-26
B-217-B-232
B-213
B-214
B-212
B-189
LNWH80XF002601

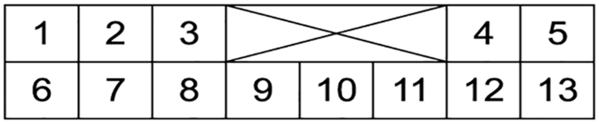
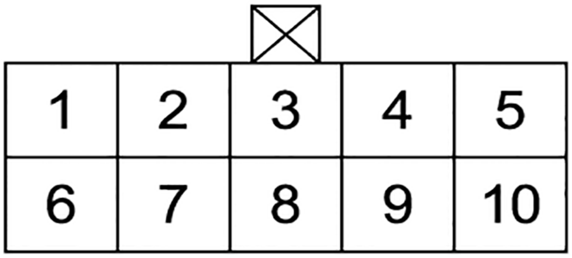
4645307

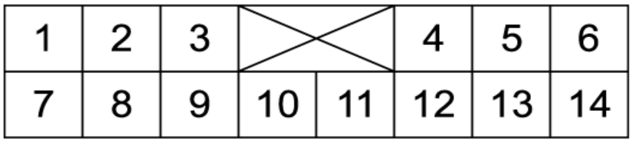
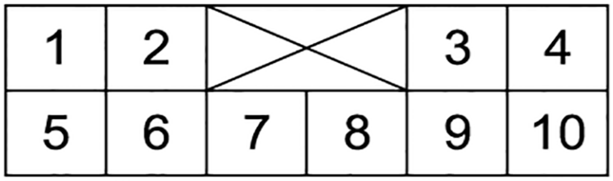
Visual Identification

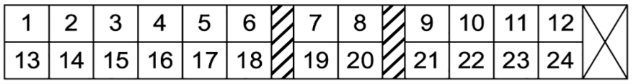
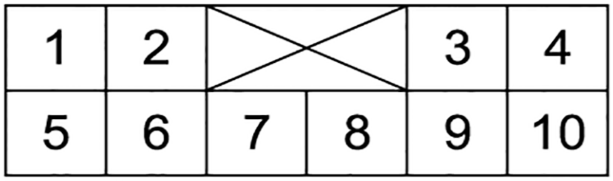
Connector List

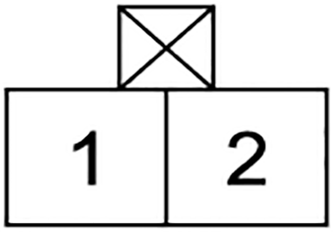
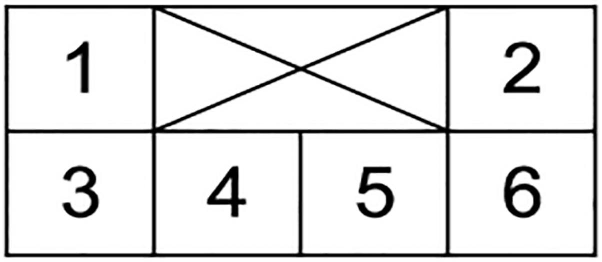
No.	Connector Face
B-5 Gray	 4497853 Accelerator Pedal Position Sensor
B-12 White	 4497856 Blower Motor
B-13 White	 4497861 Blower Resistor
B-15 Blue	 4497859 Cab J/B1.A

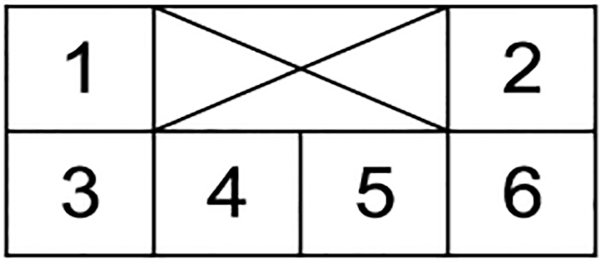
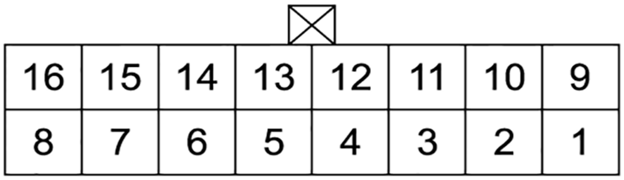
No.	Connector Face
B-16 White	 1 2 3 4 5 6 7 8 9 10 11 12 4497869 Cab J/B1.B
B-17 White	 4497873 Cab J/B1.D

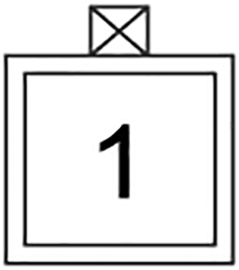
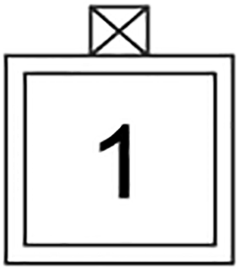
No.	Connector Face
B-18 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 4497876 Cab J/B1.E
B-19 White	 1 2 3 4 5 6 7 8 9 10 4497881 Cab J/B1.F

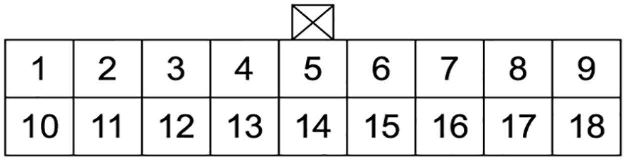
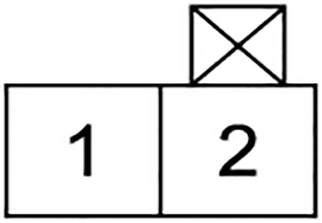
No.	Connector Face
B-20 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 4497854 Cab J/B1.G
B-21 White	 1 2 3 4 5 6 7 8 9 10 4497859 Cab J/B1.H

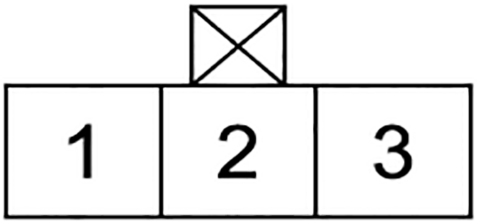
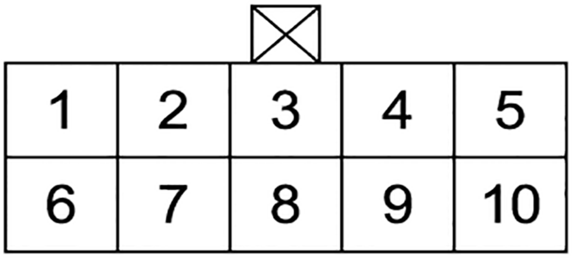
No.	Connector Face
B-22 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 4497863 Cab J/B1.J
B-23 White	 1 2 3 4 5 6 7 8 9 10 4497859 Cab J/B1.K

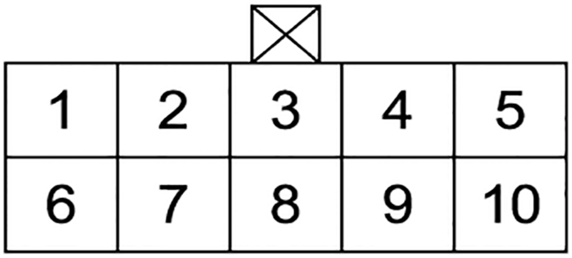
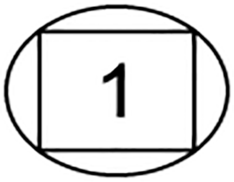
No.	Connector Face
B-24 White	 4497871 Cab J/B1.L
B-25 White	 4497874 Cab J/B1.N

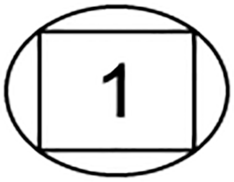
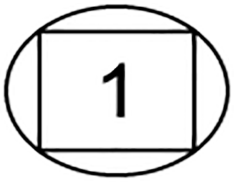
No.	Connector Face
B-26 White	 4497874 Cab J/B1.P
B-31 Gray	 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 4497882 Data Link Connector

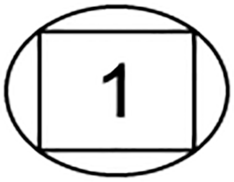
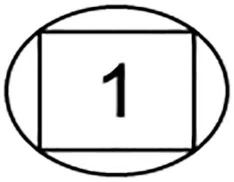
No.	Connector Face
B-33 White	 4497887 Cigarette Lighter.A
B-34 Black	 4497887 Cigarette Lighter.B

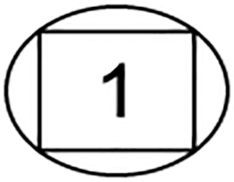
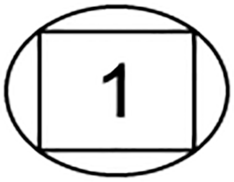
No.	Connector Face
B-35 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Combination Switch
B-39 Black	 4497979 Diode 1

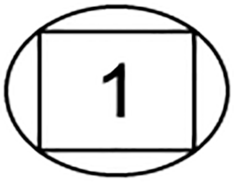
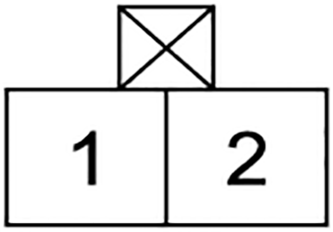
No.	Connector Face
B-45 Orange	 4497982 Diode 7
B-48 White	 1 2 3 4 5 6 7 8 9 10 4497881 Earth Joint 10P1

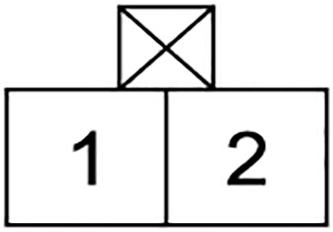
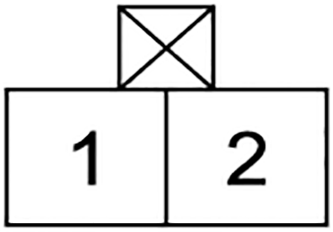
No.	Connector Face
B-49 White	 1 2 3 4 5 6 7 8 9 10 4497881 Earth Joint 10P2
B-51	 4497888 Earth Body 15

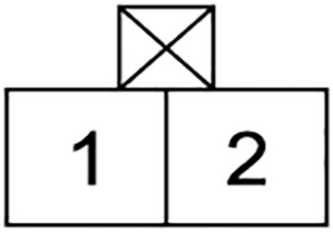
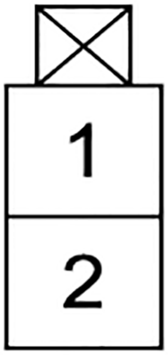
No.	Connector Face
B-52	 4497888 Earth Body 17
B-53	 4497888 Earth Body 18

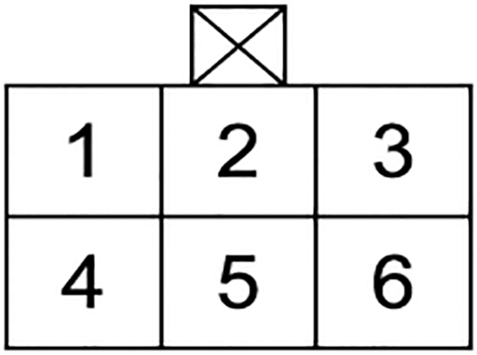
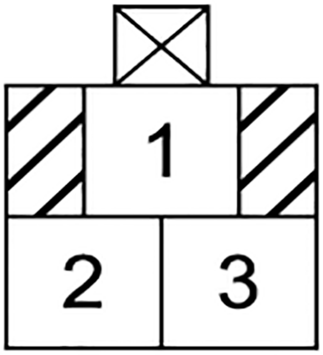
No.	Connector Face
B-54	 4497888 Earth Body 19
B-55	 4497888 Earth Body 22

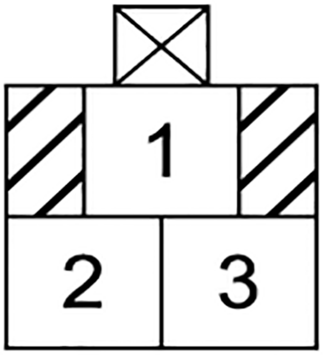
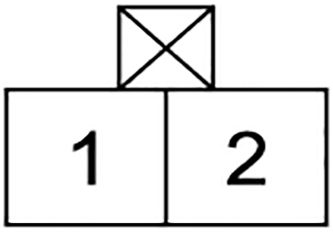
No.	Connector Face
B-56	 4497888 Earth Body 3
B-59	 4497888 Earth Body 8

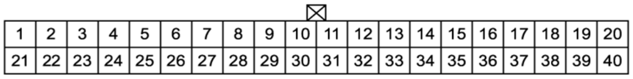
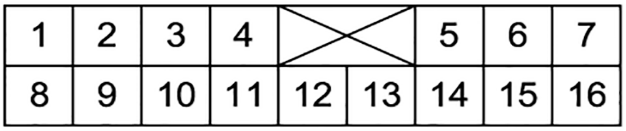
No.	Connector Face
B-60	 4497888 Earth Body 9
B-70 Gray	 4497856 Front Position Light (LH)

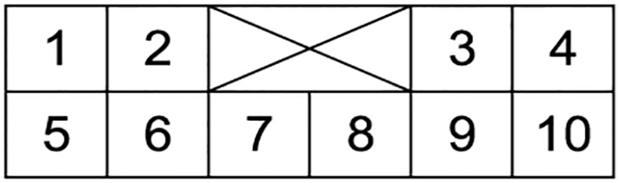
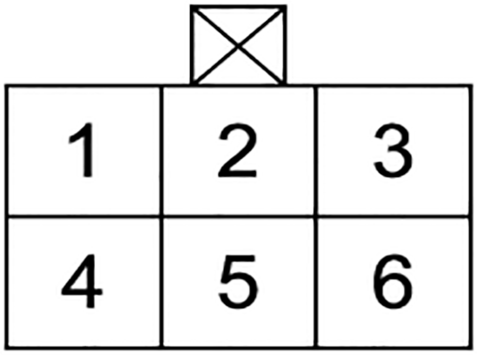
No.	Connector Face
B-71 Gray	 4497856 Front Position Light (RH)
B-72 Gray	 4497856 Front Turn Light (LH)

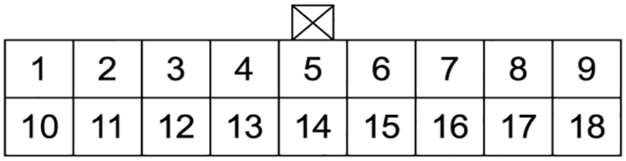
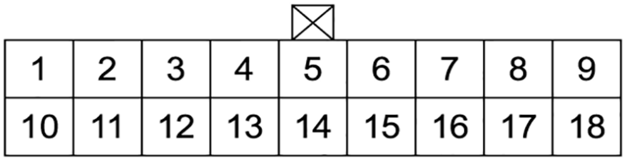
No.	Connector Face
B-73 Gray	 4497856 Front Turn Light (RH)
B-74 White	 4497990 Front Washer Motor

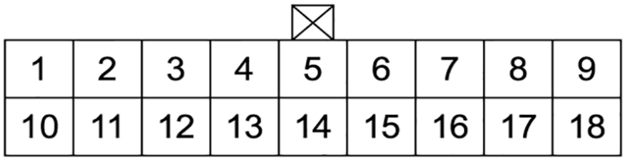
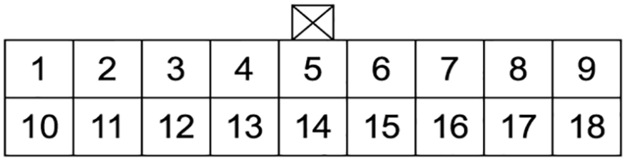
No.	Connector Face
B-75 White	 4497853 Front Wiper Motor
B-80 Black	 4497992 Headlight (LH)

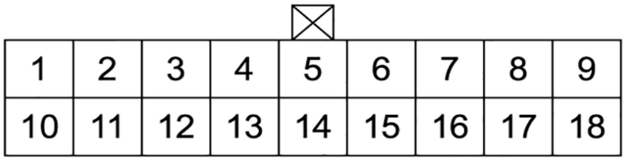
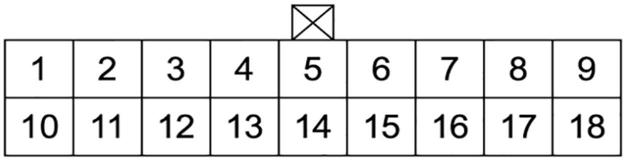
No.	Connector Face
B-81 Black	 4497992 Headlight (RH)
B-102 Gray	 4497856 Brake Fluid Level Switch

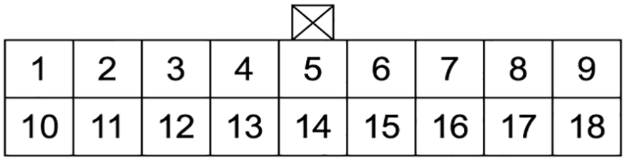
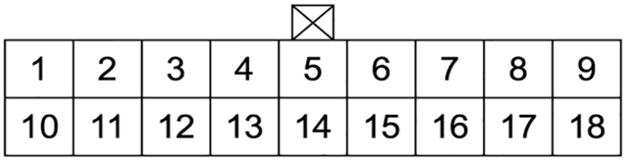
No.	Connector Face
B-105 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 4497988 IP Cluster.A
B-115 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 4497989 Audio

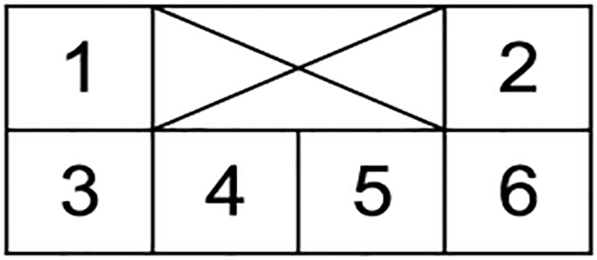
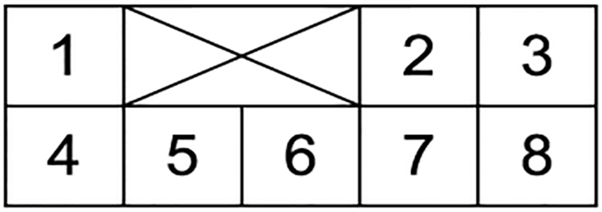
No.	Connector Face
B-120 Green	 1 2 3 4 5 6 7 8 9 10 4497867 RS232C Ch1
B-130 White	 4497853 Starter Switch 1

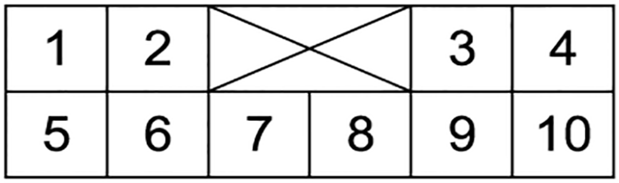
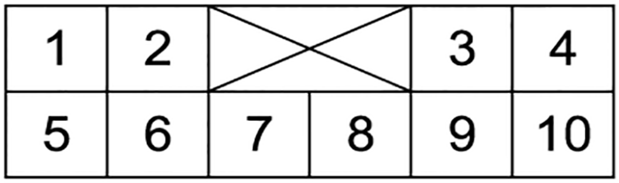
No.	Connector Face
B-131 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.A
B-132 Black	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.B

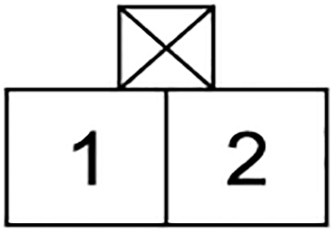
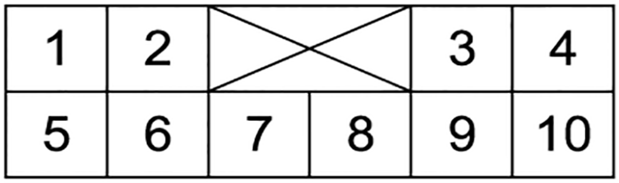
No.	Connector Face
B-133 Gray	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.C
B-134 Blue	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.D

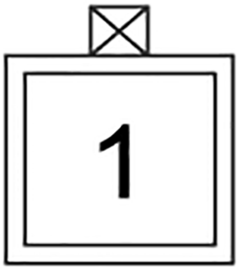
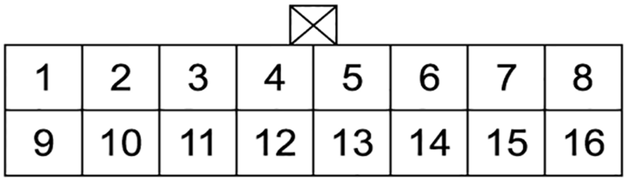
No.	Connector Face
B-135 Red	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.E
B-136 Brown	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.F

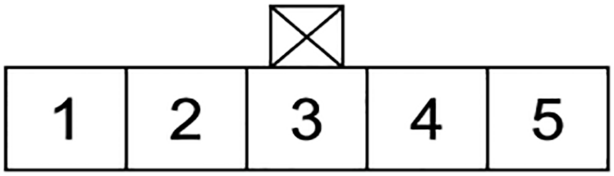
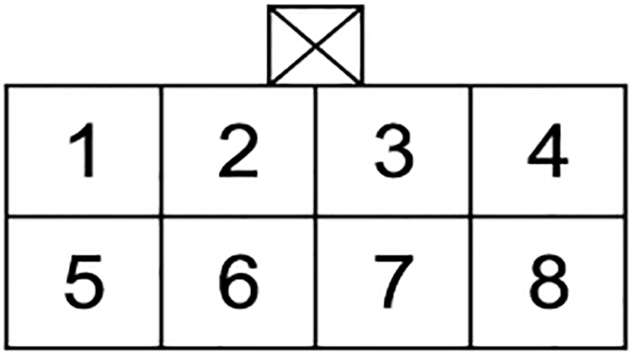
No.	Connector Face
B-137 Green	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.G
B138 Orange	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4497956 Sub J/B1.H

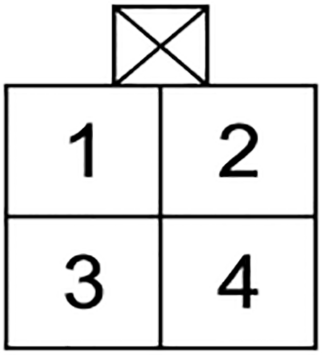
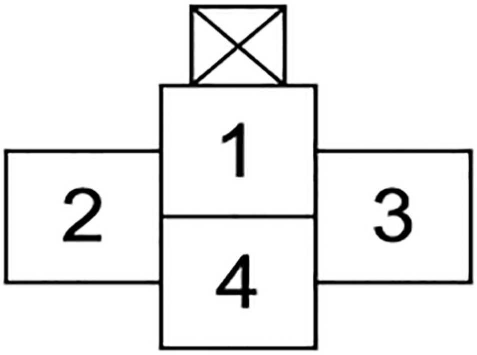
No.	Connector Face
B-158 White	 4497878 A/C Switch
B-160 White	 4498006 Blower Switch

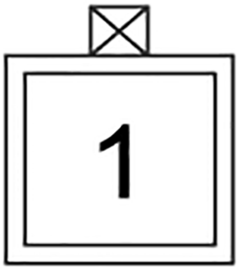
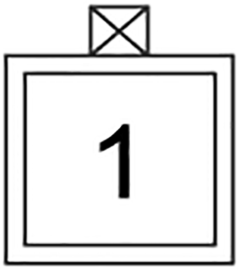
No.	Connector Face
B-165 Blue	 1 2 3 4 5 6 7 8 9 10 4497867 DPF Regeneration Switch
B-170 Black	 1 2 3 4 5 6 7 8 9 10 4497867 Hazard Switch

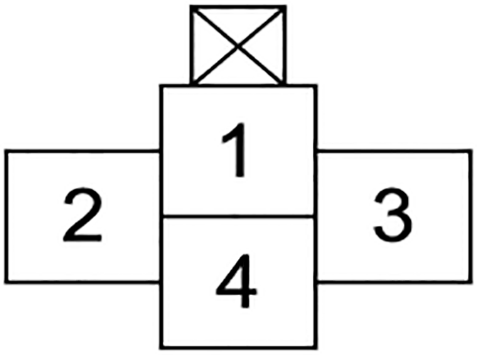
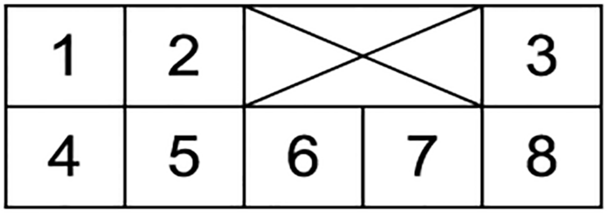
No.	Connector Face
B-172 White	 4497871 Key Reminder Switch
B-174 Gray	 1 2 3 4 5 6 7 8 9 10 4497867 Mirror Heater Switch

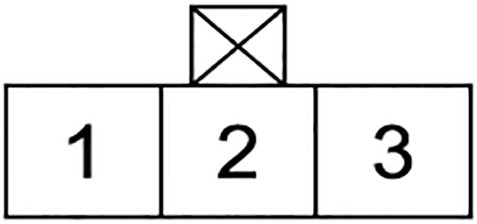
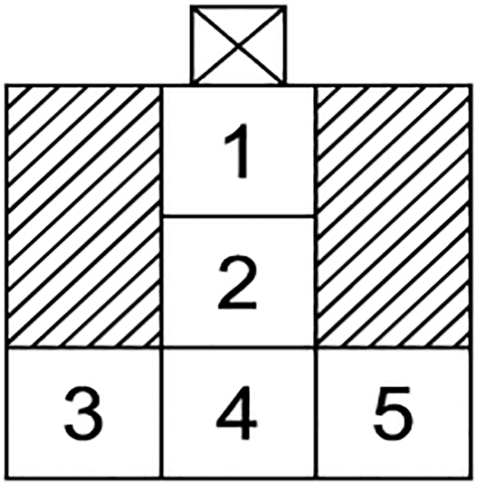
No.	Connector Face
B-184 Black	 4497887 Vacuum Tank Switch
B-188 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 4498001 Wiper and Exhaust Brake SW

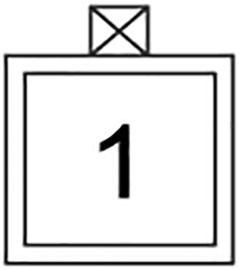
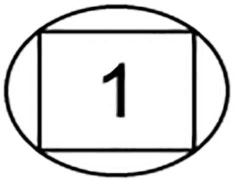
No.	Connector Face
B-189 Black	 4498002 Electronic Thermostat
B-210 Black	 4498005 Intermittent Relay

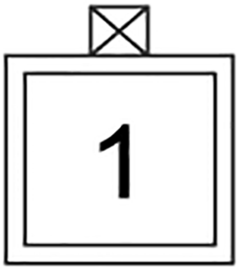
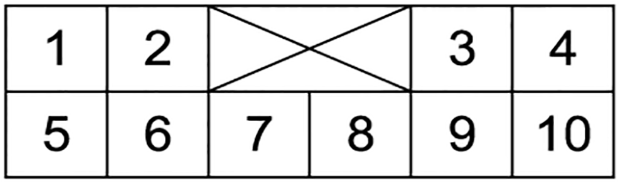
No.	Connector Face
B-211 White	 4497861 Stoplight Switch
B-212 Black	 4498007 Accessory Power Relay

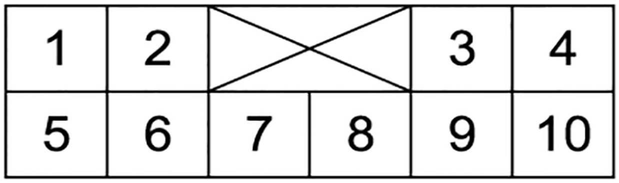
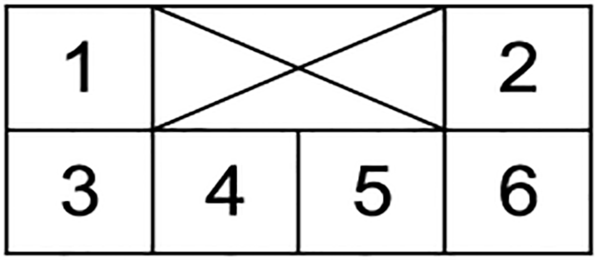
No.	Connector Face
B-213 White	 4497887 ACC Socket.A
B-214 White	 4497887 ACC Socket.B

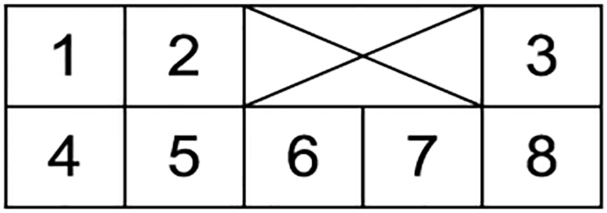
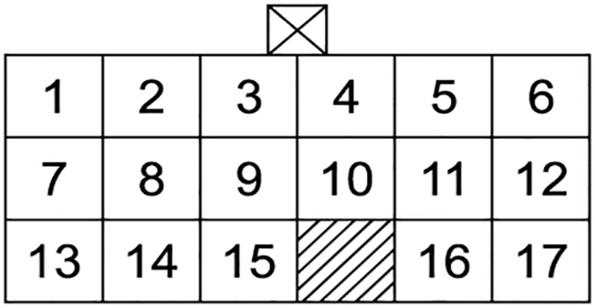
No.	Connector Face
B-215 Black	 4498007 Blower Relay
B-216 Blue	 4498011 Flasher Unit

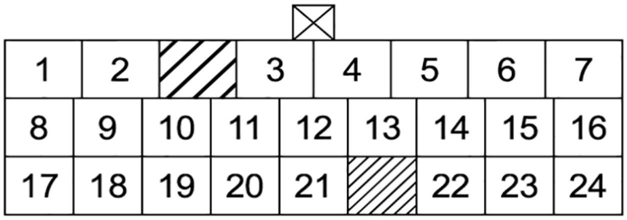
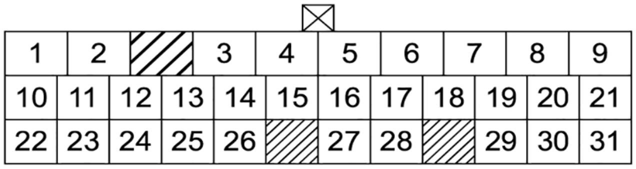
No.	Connector Face
B-217 White	 4497982 Cab J/B1.M
B-218 Black	 4498012 Cigarette Lighter Relay

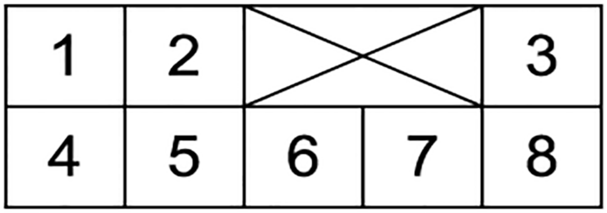
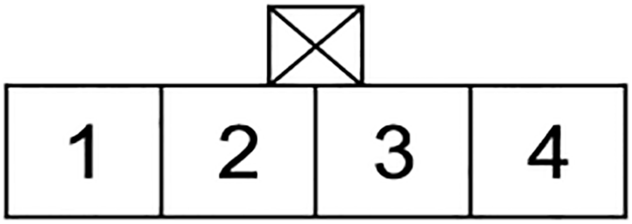
No.	Connector Face
B-220 White	 4497887 Power Source
B-221	 4497888 Earth Body 21

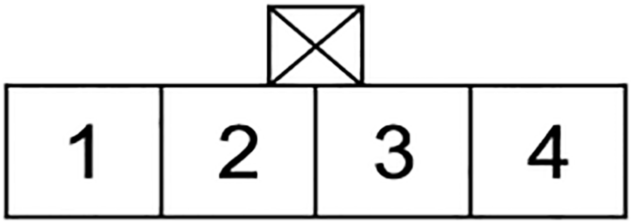
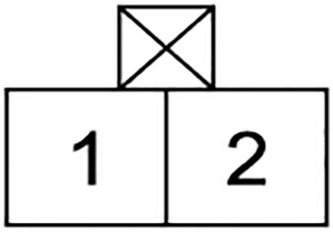
No.	Connector Face
B-223 White	 4497887 Horn Switch
B-224 Brown	 1 2 3 4 5 6 7 8 9 10 4497867 Cruise Main Switch

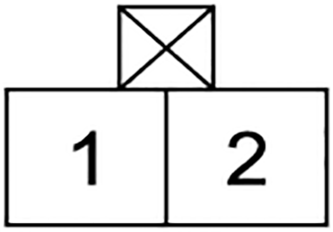
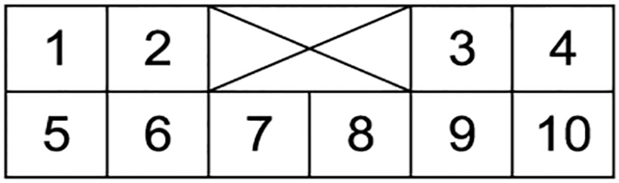
No.	Connector Face
B-225 Black	 1 2 3 4 5 6 7 8 9 10 4497867 DRL Control Unit. A
B-226 Black	 4497878 DRL Control Unit .B

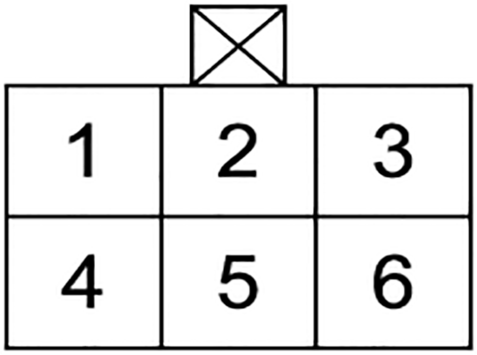
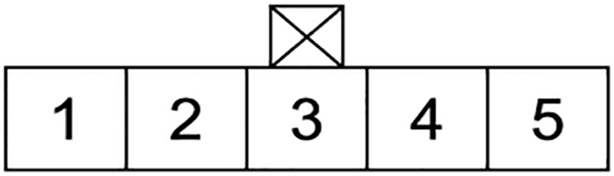
No.	Connector Face
B-227 Gray	 4498011 Door Lock Relay
B-228 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 4498020 TCM (A)

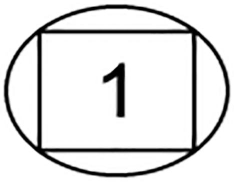
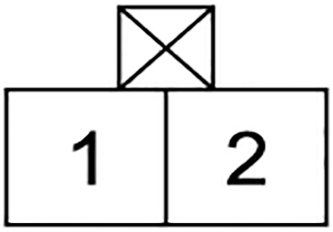
No.	Connector Face
B-229 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 4498022 TCM (B)
B-230 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 4498023 TCM (C)

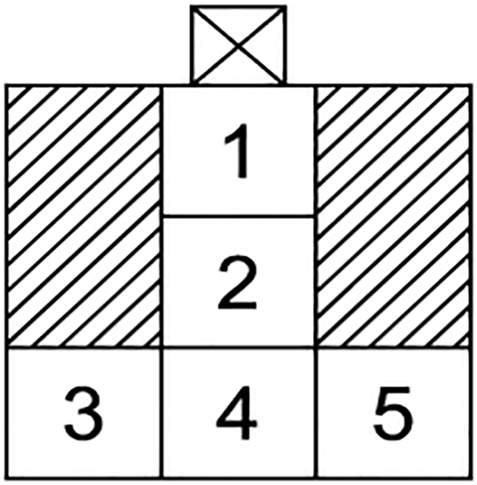
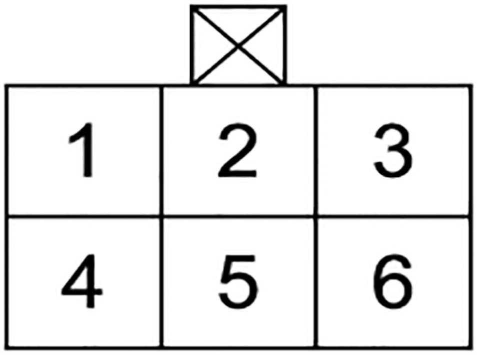
No.	Connector Face
B-232 White	 1 2 3 4 5 6 7 8 4498011 Cab J/B1.C
B-235 White	 1 2 3 4 4498036 CAN2 Joint check-L

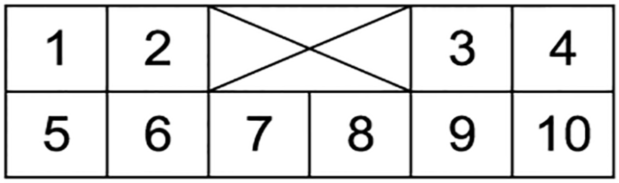
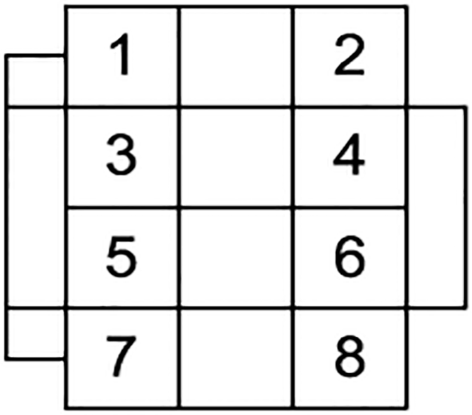
No.	Connector Face
B-236 White	 1 2 3 4 4498036 CAN2 Joint check-H
B-237 Black	 Pressure Switch

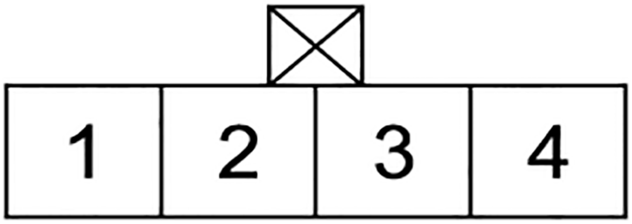
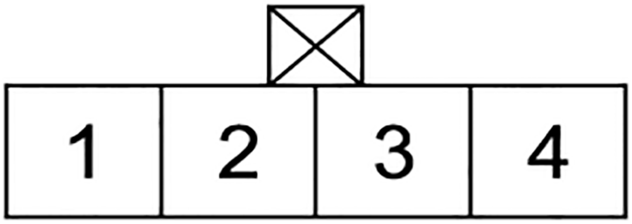
No.	Connector Face
B-238 White	 4497871 Vacuum Pump
B-239 Blue	 4497867 Check Miles and Check Oil Level Switch

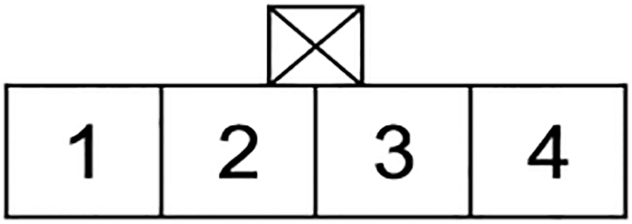
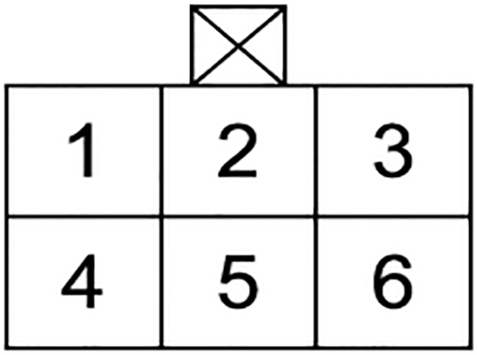
No.	Connector Face
B-240 Blue	 4497853 Door Lock Switch
B-241 Black	 4498002 Illumination Control Switch

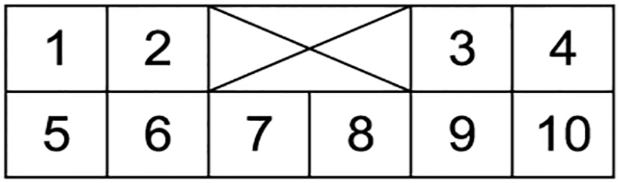
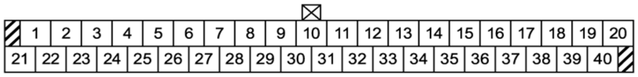
No.	Connector Face
B-244	 4497888 Earth Body 2
B-245 White	 4497871 Defroster Switch

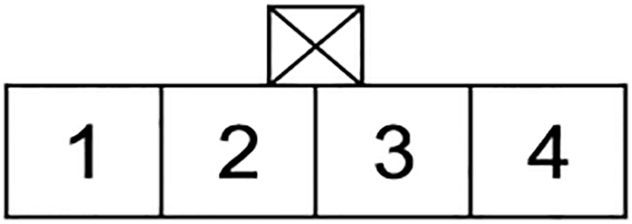
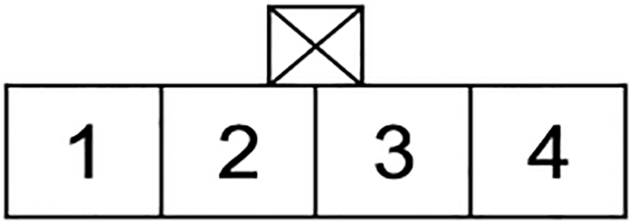
No.	Connector Face
B-246 Black	 4498012 Cornering Light Relay
B-247 Orange	 4497853 PTO Engine Speed Control Switch

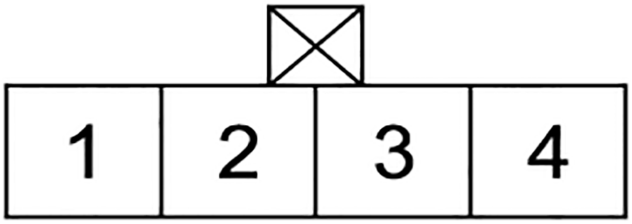
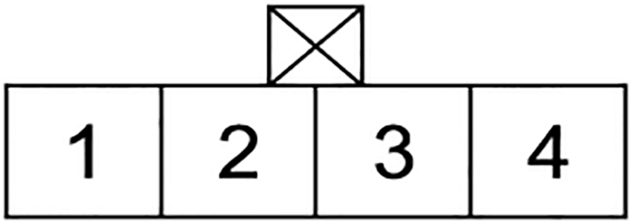
No.	Connector Face
B-248 Green	 1 2 3 4 5 6 7 8 9 10 4497867 PTO Switch 2
B-250	 4498037 Fuse Block 1

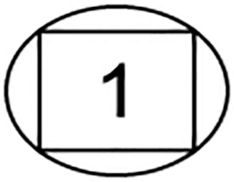
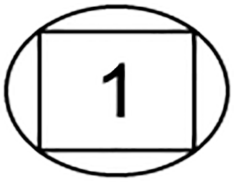
No.	Connector Face
B-267 White	 4498036 J/C-100
B-268 White	 4498036 J/C-101

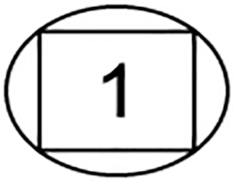
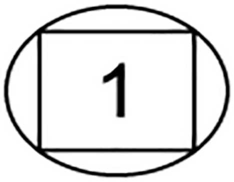
No.	Connector Face
B-269 White	 4498036 J/C-50
B-282 White	 4497853 Rear Body Switch

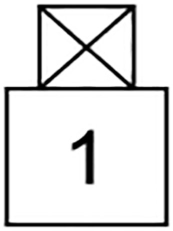
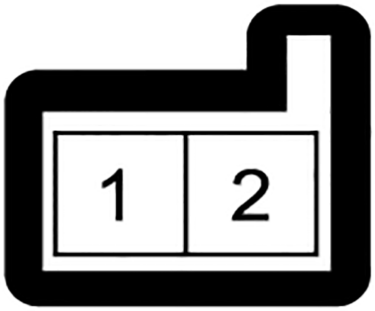
No.	Connector Face
B-351 White	 1 2 3 4 5 6 7 8 9 10 4497867 Keyless Entry Control Unit
B-402 Gray	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 4498045 MIMAMORI C/U

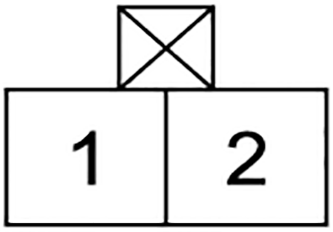
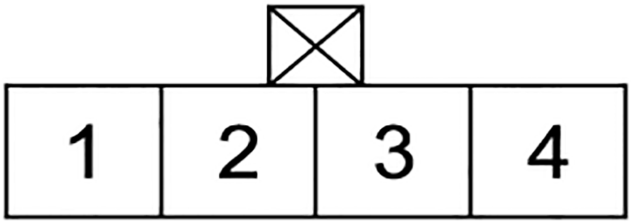
No.	Connector Face
B-403 White	 4498036 J/C-CAN1 MIMAMORI-L
B-404 White	 4498036 J/C-CAN1 MIMAMORI-H

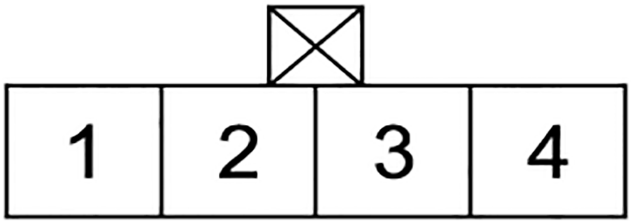
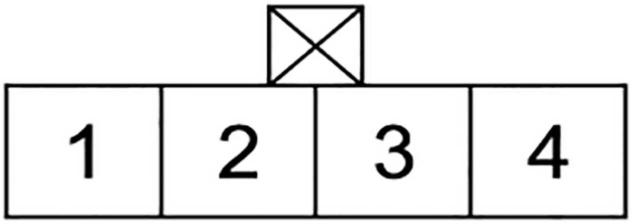
No.	Connector Face
B-405 White	 4498036 J/C-CAN2 MIMAMORI-L
B-406 White	 4498036 J/C-CAN2 MIMAMORI-H

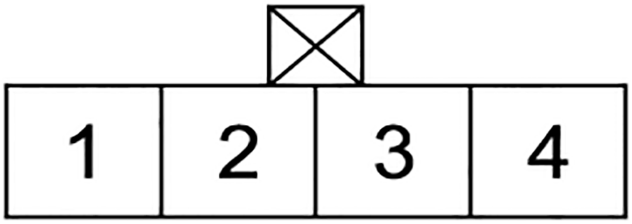
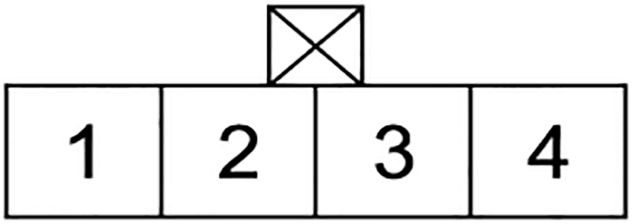
No.	Connector Face
B-409	 EXT_ETB-1
B-410	 EXT_ETB-2

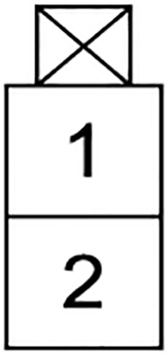
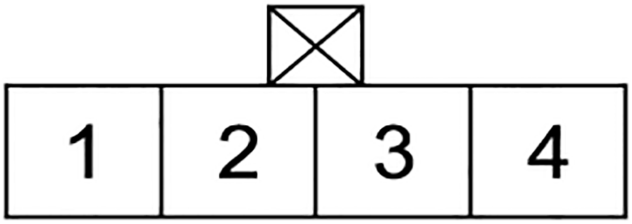
No.	Connector Face
B-411	 EXT_ETB-3
B-412	 EXT_ETB-4

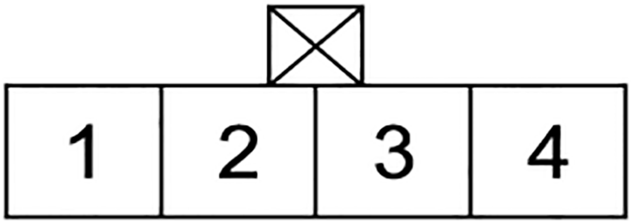
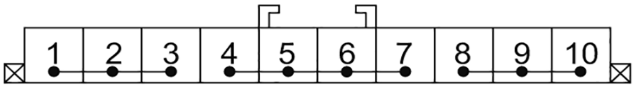
No.	Connector Face
B-414 Black	 4498047 TR Brake
B-443 Black	 4498048 Diode Door Lock

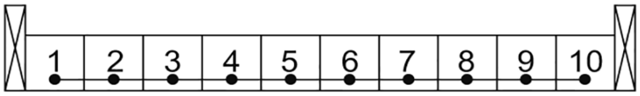
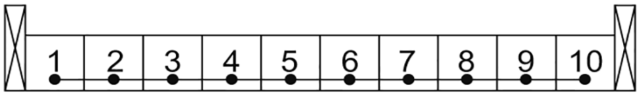
No.	Connector Face
B-450 White	 4497871 FMS CAN Connector
B-451	The final page of connector list
B-452 White	 4498036 J/C FMS-B

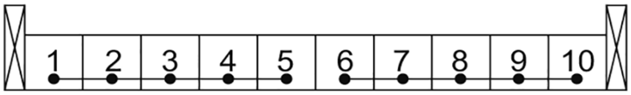
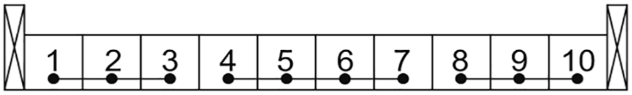
No.	Connector Face
B-453 White	 4498036 J/C FMS-E
B-454 White	 4498036 J/C FMS-IG

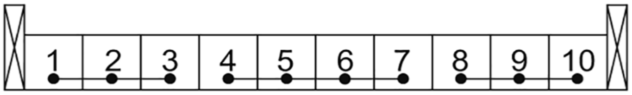
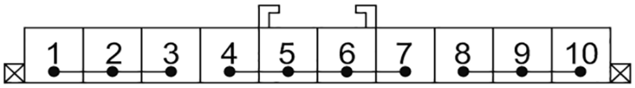
No.	Connector Face
B-455 White	 4498036 J/C CANOUT-H
B-456 White	 4498036 J/C CANOUT-L

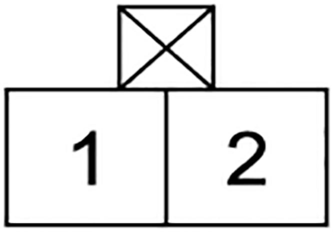
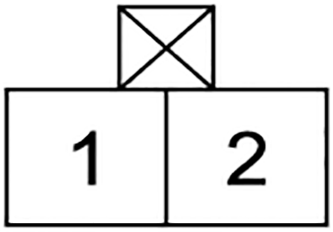
No.	Connector Face
B-457 Blue	 4497990 Terminal FMS
B-458 White	 4498036 CAN1 Joint - FMS-H

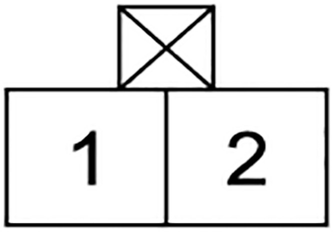
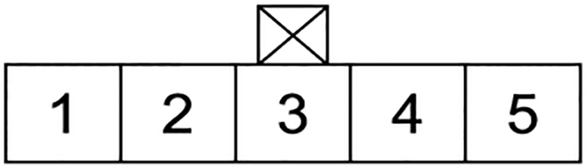
No.	Connector Face
B-459 White	 4498036 CAN1 Joint - FMS-L
B-505 White	 4498167 J/C 10P BASE 1

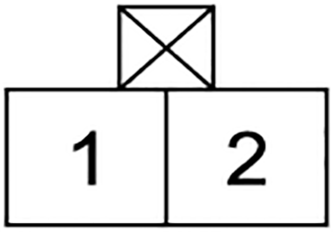
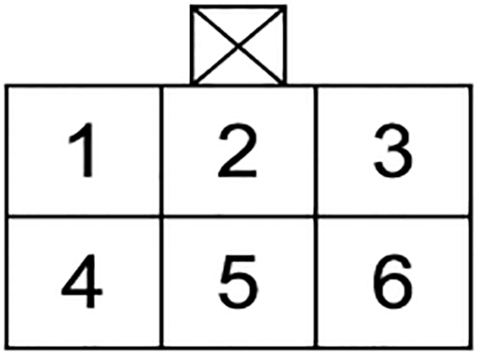
No.	Connector Face
B-506 Green	 1 2 3 4 5 6 7 8 9 10 4498160 J/C 10P BASE 2
B-507 Green	 1 2 3 4 5 6 7 8 9 10 4498160 J/C 10P BASE 3

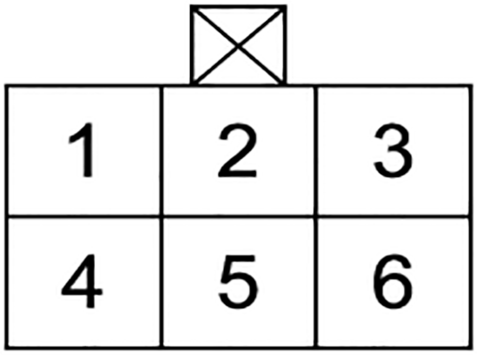
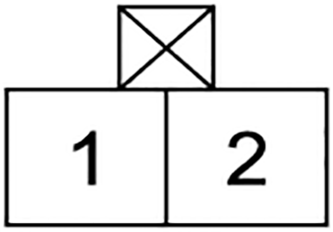
No.	Connector Face
B-508 Black	 1 2 3 4 5 6 7 8 9 10 4498162 J/C 10P ADD 1
B-518 White	 1 2 3 4 5 6 7 8 9 10 4498166 J/C 10P ADD 2

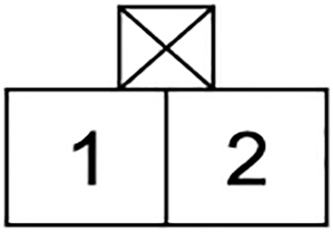
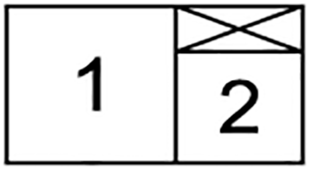
No.	Connector Face
B-519 White	 1 2 3 4 5 6 7 8 9 10 4498166 J/C 10P ADD 3
B-520 White	 1 2 3 4 5 6 7 8 9 10 4498167 J/C 10P ADD 4

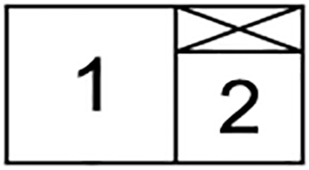
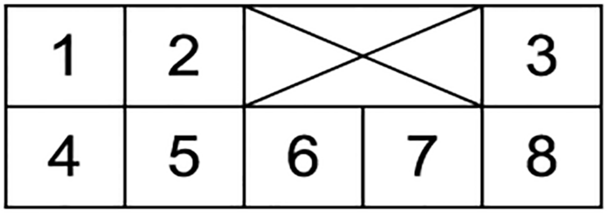
No.	Connector Face
B-559 White	 4497871 Key Lock Solenoid
D-2 Gray	 4497871 Front Cornering Light (LH)

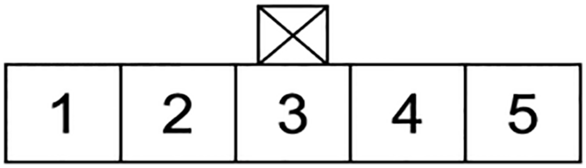
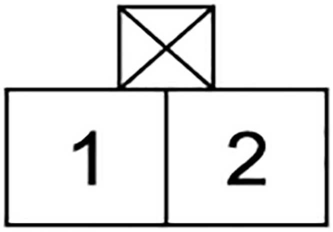
No.	Connector Face
D-3 Gray	 4497871 Front Cornering Light (RH)
D-5 Gray	 4498169 Front Door Lock Motor(LH)

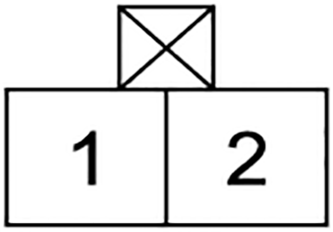
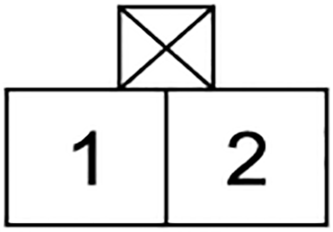
No.	Connector Face
D-7 Gray	 4497871 Front Door Lock Motor(RH)
D-9 Green	 4497853 Front Power Window Motor (LH)

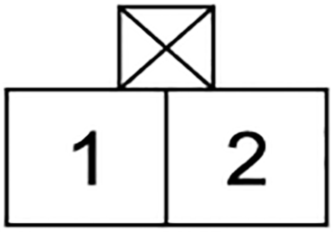
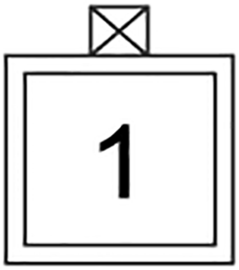
No.	Connector Face
D-11 Green	 4497853 Front Power Window Motor (RH)
D-12 Brown	 4497871 Side Turn Light (LH)

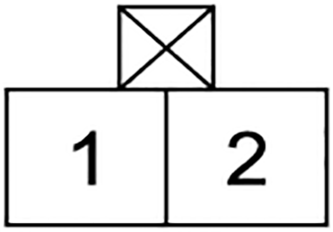
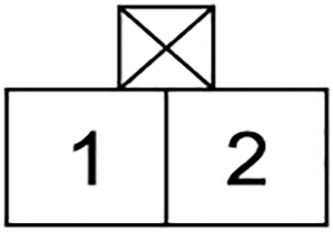
No.	Connector Face
D-13 Brown	 4497871 Side Turn Light (RH)
D-17 Black	 4498174 Speaker (LH)

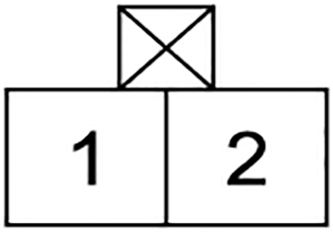
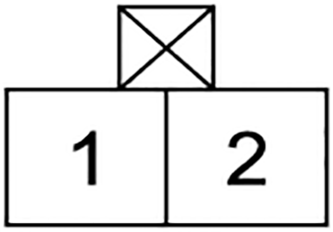
No.	Connector Face
D-19 Black	 4498174 Speaker (RH)
D-21 White	 4498011 Front Power Window Switch (LH)

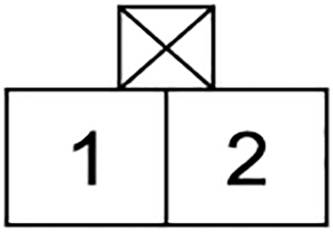
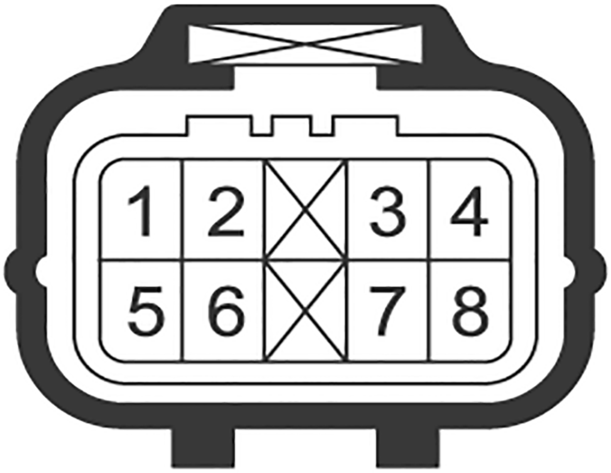
No.	Connector Face
D-22 Gray	 4498169 Front Power Window Switch (RH)
D-40 Gray	 4497871 Heater Mirror (LH)

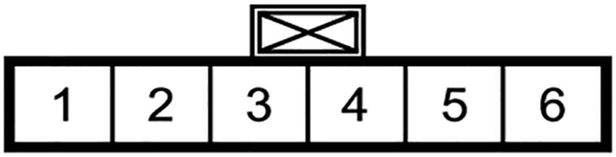
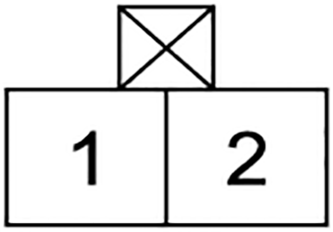
No.	Connector Face
D-41 Gray	 4497871 Side Marker (LH)
D-42 Gray	 4497871 Heater Mirror (RH)

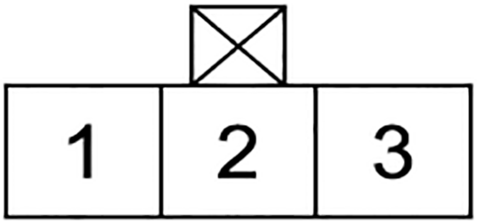
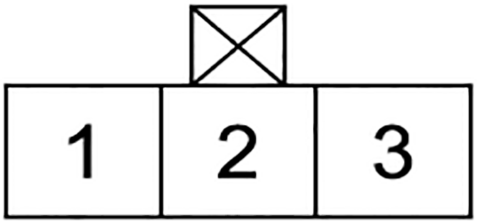
No.	Connector Face
D-43 Gray	 4497871 Side Marker (RH)
E-3 Black	 4497887 A/C Compressor

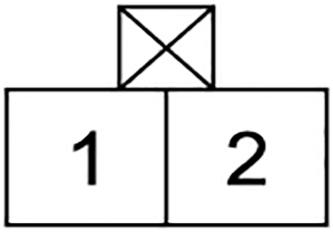
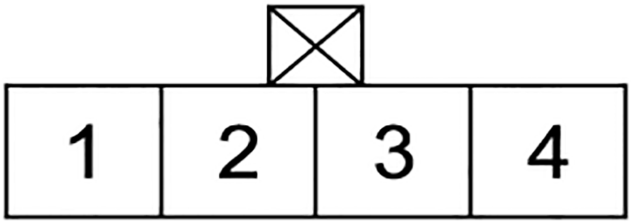
No.	Connector Face
E-5 Black	 Fuel Injector #1 Cylinder
E-6 Black	 Fuel Injector #2 Cylinder

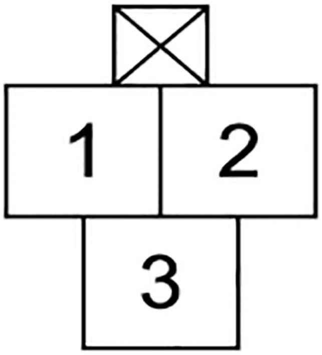
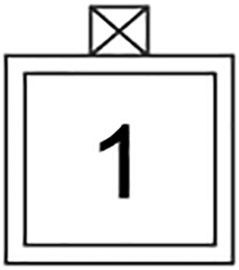
No.	Connector Face
E-7 Black	 Fuel Injector #3 Cylinder
E-8 Black	 Fuel Injector #4 Cylinder
E-12	The final page of connector list

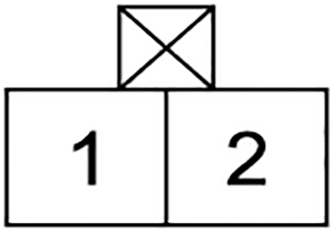
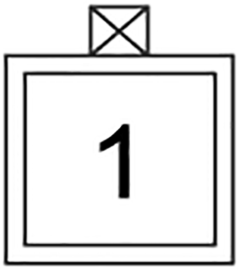
No.	Connector Face
E-13 Brown	 4497871 Turbocharger Nozzle Control Solenoid Valve
E-15 Black	 4498302 EGR Valve

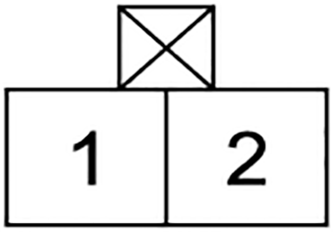
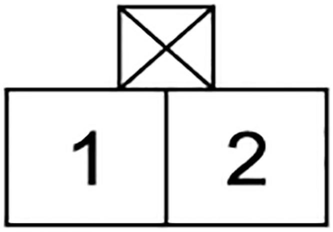
No.	Connector Face
E-16 Black	 4498304 Intake Airflow (IAF) Valve
E-17 Black	 4497871 FRP Regulator

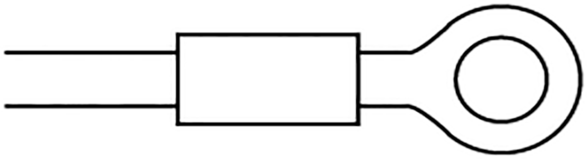
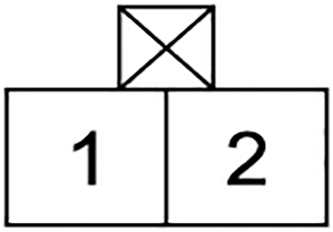
No.	Connector Face
E-18 Black	 4497982 Camshaft Position Sensor
E-19 Black	 4497982 Fuel Rail Pressure (FRP) Sensor

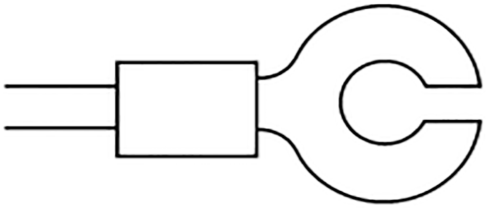
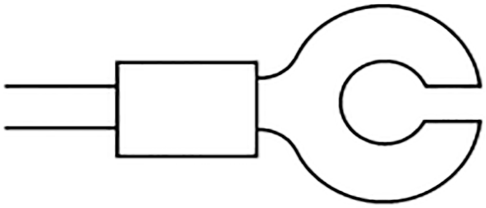
No.	Connector Face
E-22 Black	 4497871 Fuel Temp Sensor
E-24 Dark Gray	 4498036 Boost Pressure/ Intake Air Temperature (IAT) Sensor 2

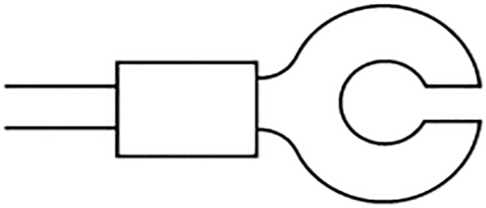
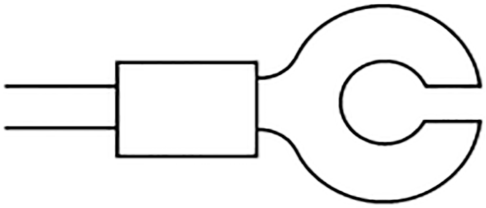
No.	Connector Face
E-25 Dark Gray	 4498299 Engine Coolant Temperature (ECT) Sensor
E-26 White	 4497887 Starter (C)

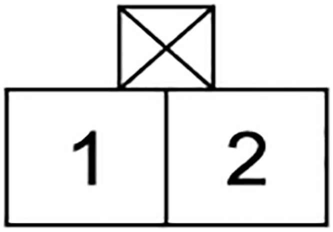
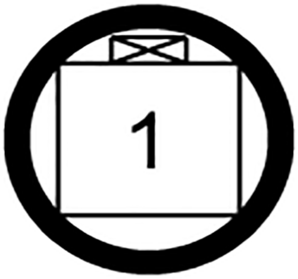
No.	Connector Face
E-29 Gray	 4497871 Oil Level Switch
E-30 Gray	 4497887 Engine Oil Pressure Switch

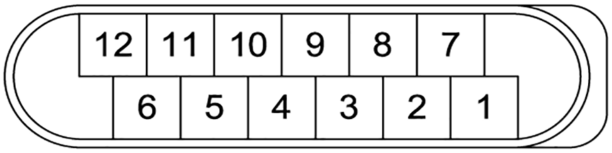
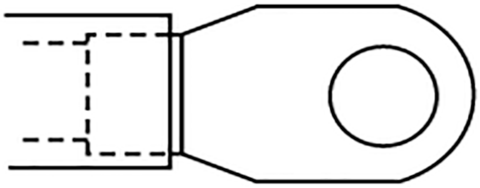
No.	Connector Face
E-31 Dark Gray	 4497871 Fuel Sedimenter Switch
E-50	 4497871 Generator

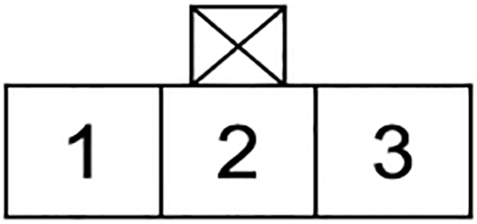
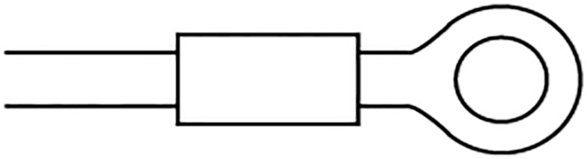
No.	Connector Face
E-51 Gray	 4498314 Generator (B)
E-55 Black	 4497871 Resistor

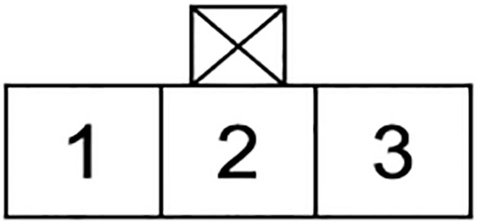
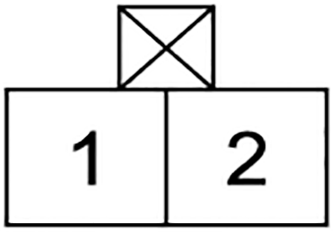
No.	Connector Face
E-56	 Glow Plug #1
E-57	 Glow Plug #2

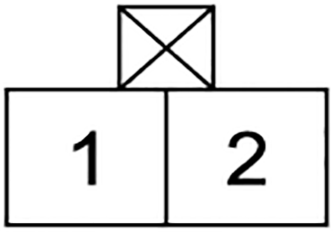
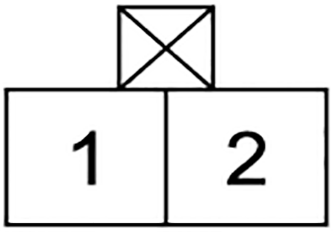
No.	Connector Face
E-58	 Glow Plug #3
E-59	 Glow Plug #4

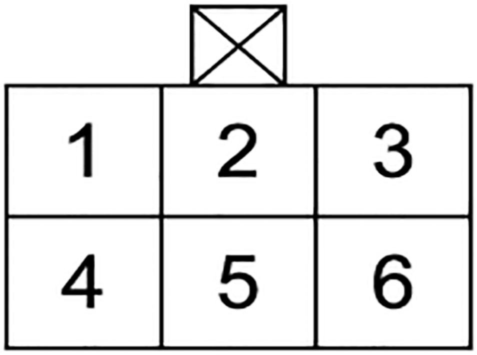
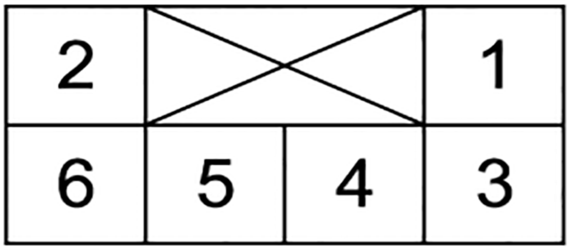
No.	Connector Face
E-62 Black	 4497871 EGR Gas Temp (Out) Sensor 1
E-64 Black	 4498312 Glow Plug Control Module 1

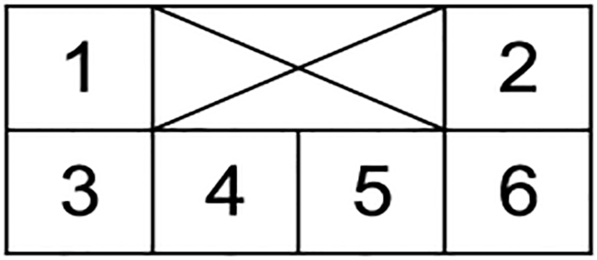
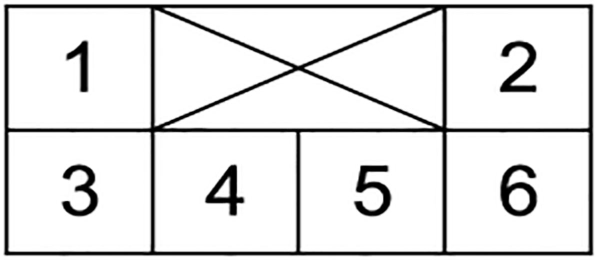
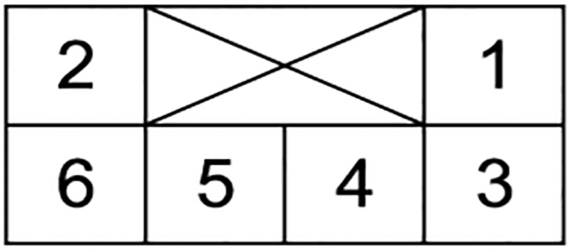
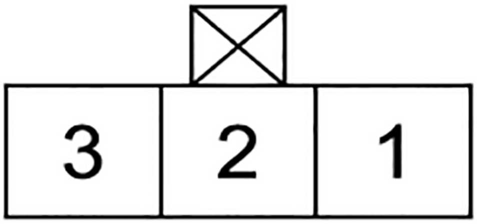
No.	Connector Face
E-65 Black	 4498316 Glow Plug Control Module 2
E-67	 4498317 Starter (B)

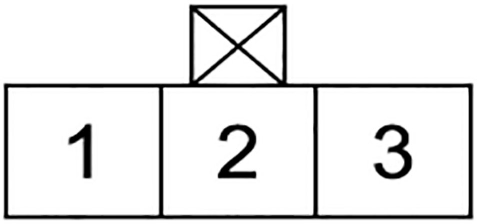
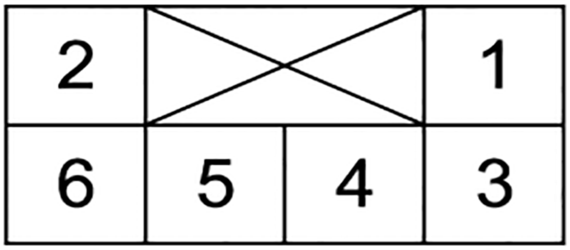
No.	Connector Face
E-69 Black	 4497982 Crankshaft Position Sensor
E-74	 4498314 Engine Earth

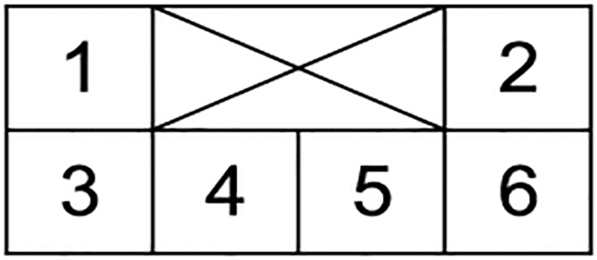
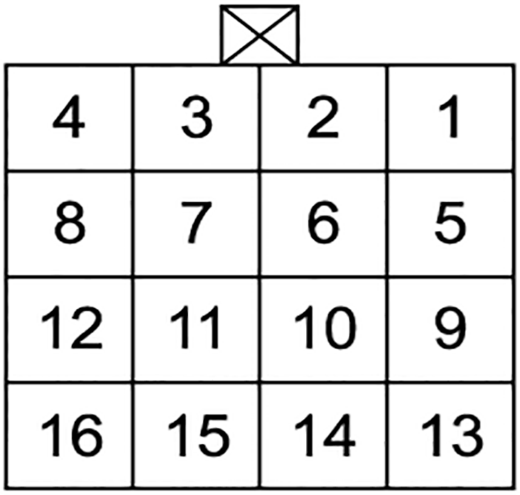
No.	Connector Face
E-148 Black	 4497982 Crankcase Pressure Sensor
E-149 Blue	 4497871 EGR Cooler Bypass Control Solenoid Valve

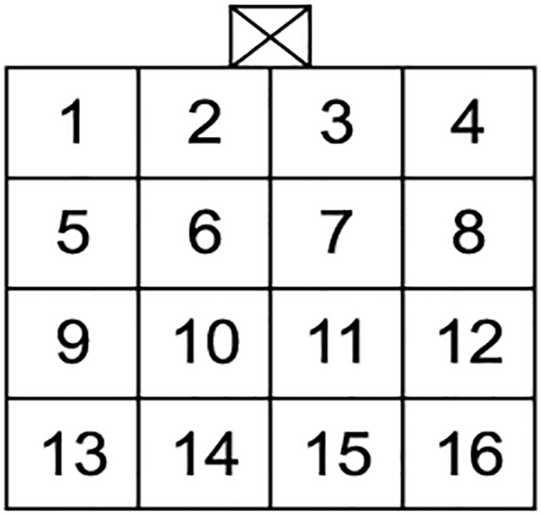
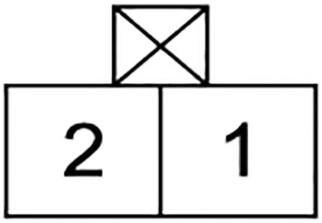
No.	Connector Face
E-150 Dark Gray	 4497871 EGR Gas Temperature Sensor 1
E-163 Black	 4497871 Fuel Rail Pressure (FRP) Control Valve

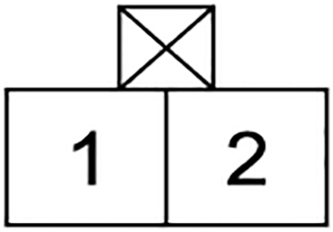
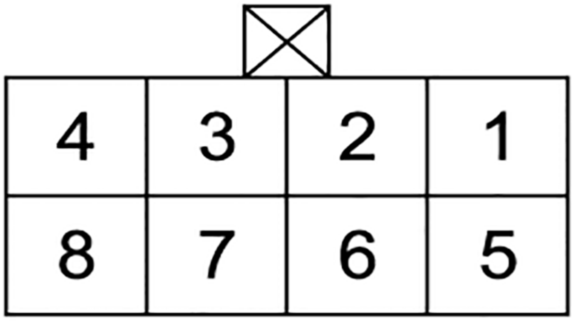
No.	Connector Face
E-164 Black	 4497853 Heated Oxygen Sensor
H-31 White	 4498340 Inst H.–Door (LH) H.

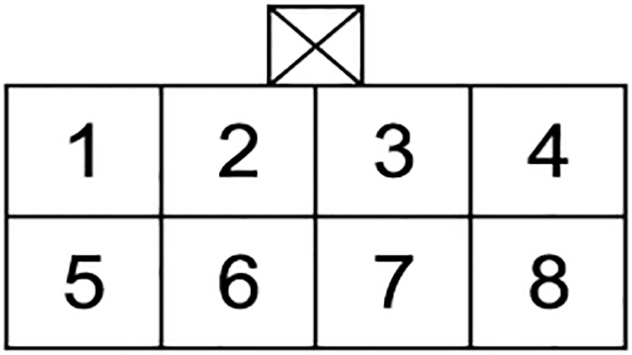
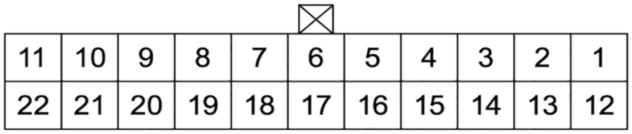
No.	Connector Face	No.	Connector Face
H-31 White	 1 2 3 4 5 6 4497878 Inst H.– Door (LH) H.	H-32 Black	 1 2 3 4 5 6 4497878 Inst H.–Door (RH) H.
H-32 Black	 2 1 6 5 4 3 4498340 Inst H.–Door (RH) H.	H-33 Black	 3 2 1 4498355 Inst H.– Floor (RH) H.

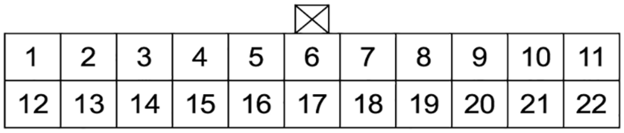
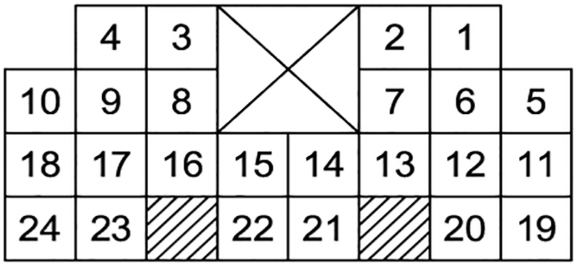
No.	Connector Face
H-33 Black	 4497982 Inst H.– Floor (RH) H.
H-45 White	 4498340 Inst H.□Roof H.

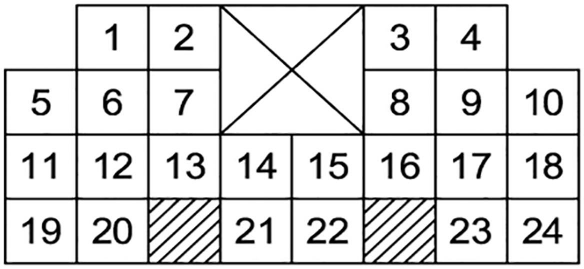
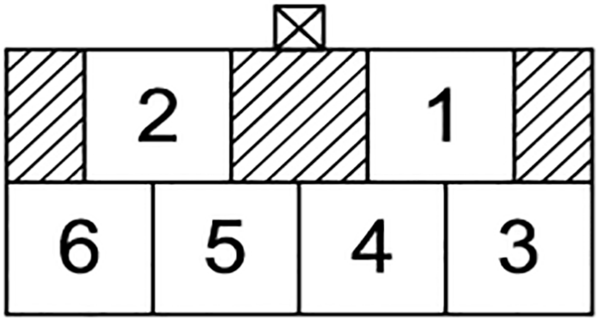
No.	Connector Face
H-45 White	 4497878 Inst H.– Roof H.
H-52 Black	 4 3 2 1 8 7 6 5 12 11 10 9 16 15 14 13 4498347 Frame Front H.– Engine1 H.

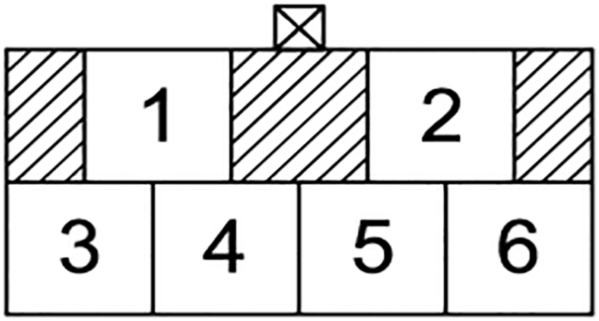
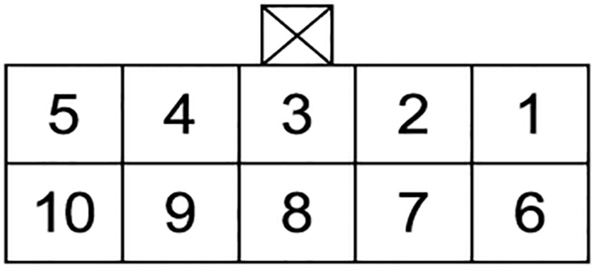
No.	Connector Face
H-52 Black	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 4498351 Frame Front H.– Engine1 H.
H-53 Gray	 Frame Front H.– Engine2 H.

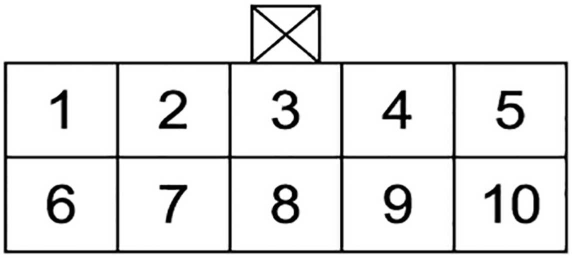
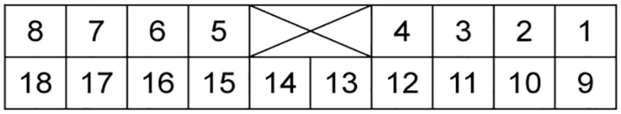
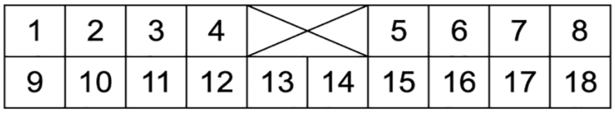
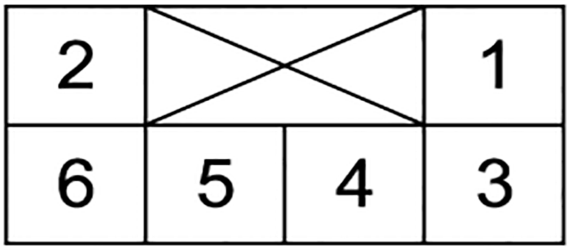
No.	Connector Face
H-53 Gray	 Frame Front H.– Engine2 H.
H-66 Black	 4 3 2 1 8 7 6 5 4498358 Frame Rear H.– Rear Combi H.

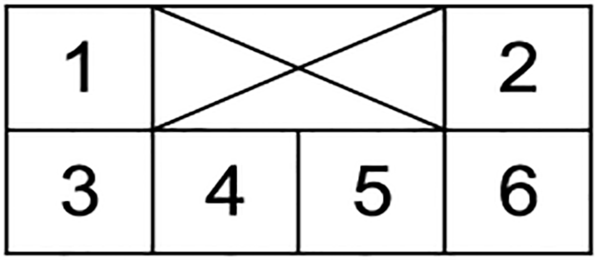
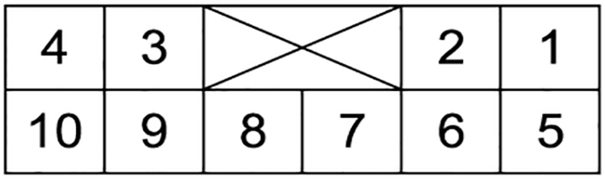
No.	Connector Face
H-66 Black	 4498005 Frame Rear H.– Rear Combi H.
H-80 Black	 11 10 9 8 7 6 5 4 3 2 1 22 21 20 19 18 17 16 15 14 13 12 4498367 Inst H.– Frame Front H.

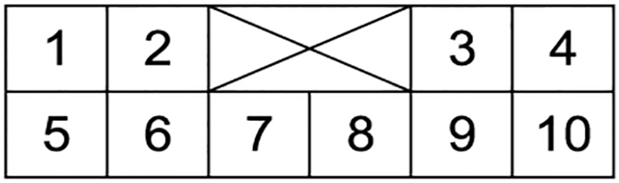
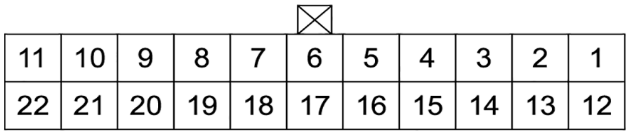
No.	Connector Face
H-80 Black	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 4498370 Inst H.– Frame Front H.
H-81 Green	 4 3 2 1 10 9 8 7 6 5 18 17 16 15 14 13 12 11 24 23 22 21 20 19 4498374 Inst H.– Frame Front H.

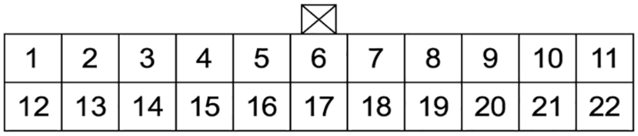
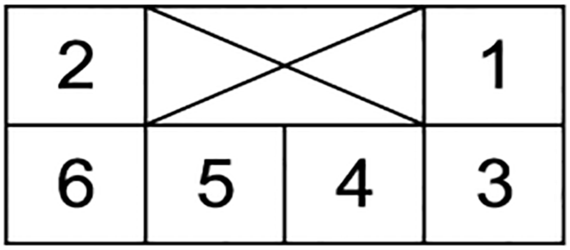
No.	Connector Face
H-81 Green	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 4498376 Inst H.– Frame Front H.
H-82 Gray	 4498378 Inst H.– Frame Front H.

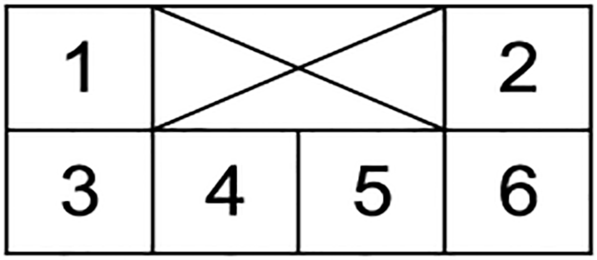
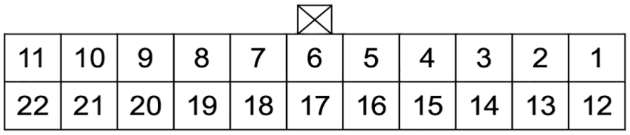
No.	Connector Face
H-82 Gray	 4498382 Inst H.– Frame Front H.
H-83 White	 5 4 3 2 1 10 9 8 7 6 4498383 Inst H. – Frame Front H.

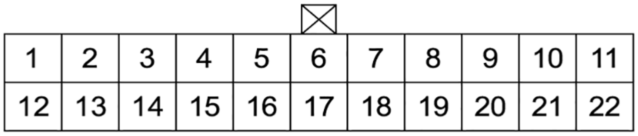
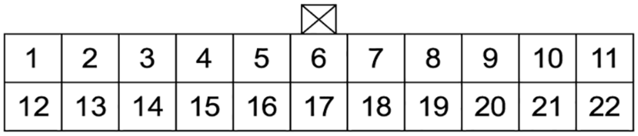
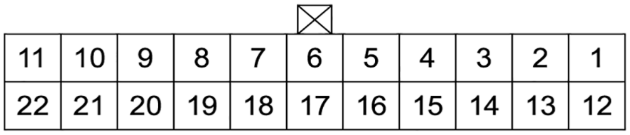
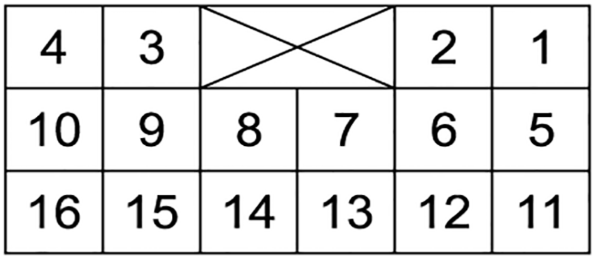
No.	Connector Face
H-83 White	 1 2 3 4 5 6 7 8 9 10 4497881 Inst H. – Frame Front H.
H-84 White	 8 7 6 5 4 3 2 1 18 17 16 15 14 13 12 11 10 9 4498369 Inst H.– Inst H.
H-84 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4498371 Inst H.– Inst H.
H-85 Black	 4498340 Inst H.– Floor (LH) H.

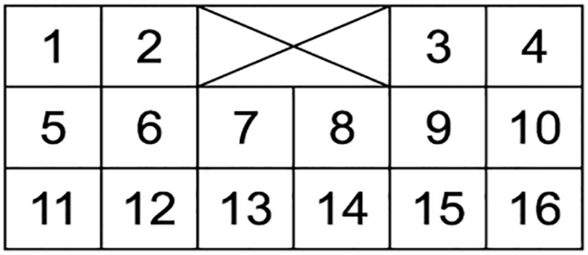
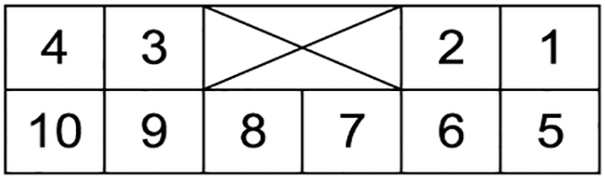
No.	Connector Face
H-85 Black	 4497878 Inst H.– Floor (LH) H.
H-87 Green	 4 3 2 1 10 9 8 7 6 5 4498380 Inst H.– Door (RH) H.

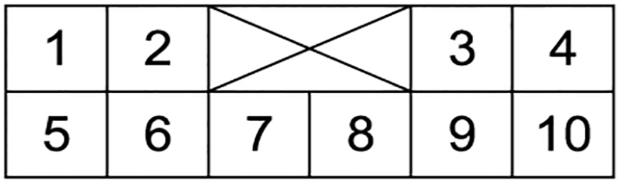
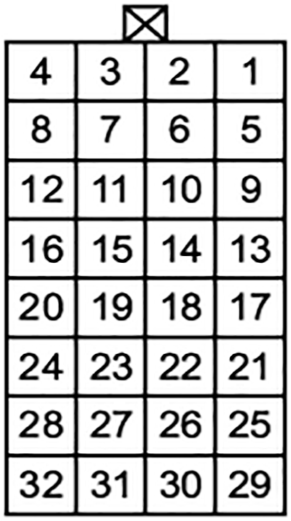
No.	Connector Face
H-87 Green	 1 2 3 4 5 6 7 8 9 10 4497867 Inst H.–Door (RH) H.
H-88 Blue	 11 10 9 8 7 6 5 4 3 2 1 22 21 20 19 18 17 16 15 14 13 12 4498385 Inst H.– Frame Front H.

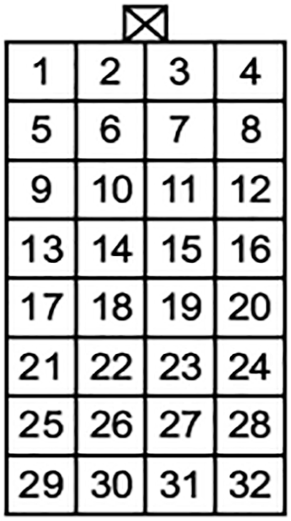
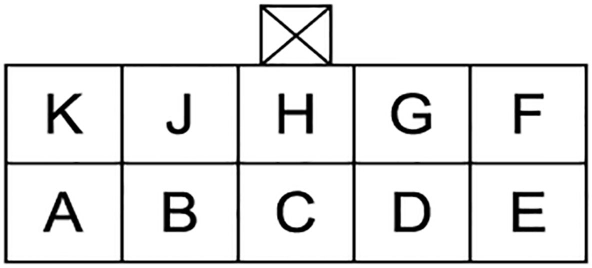
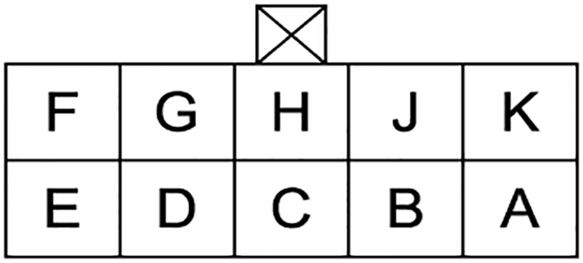
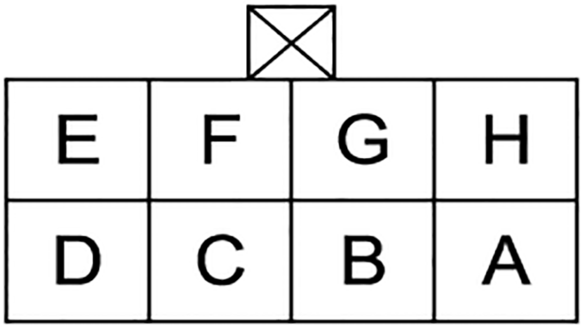
No.	Connector Face
H-88 Blue	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 4498387 Inst H.– Frame Front H.
H-89 Orange	 4498340 Inst H.– Frame Front H.

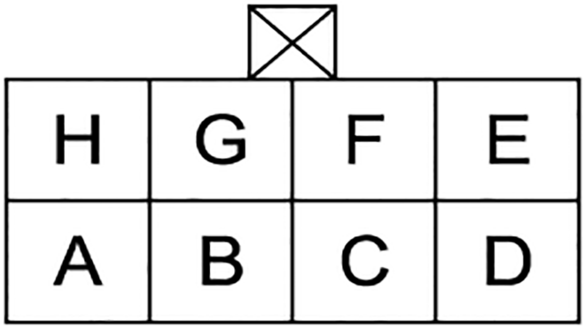
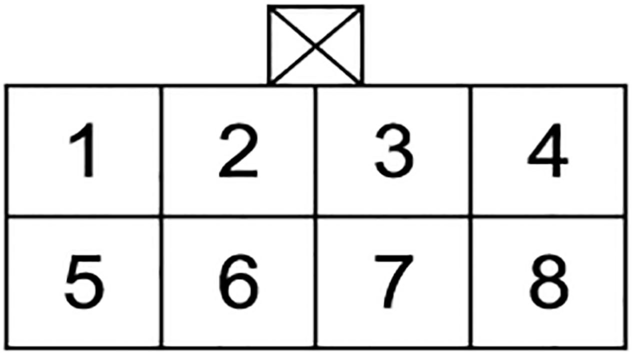
No.	Connector Face
H-89 Orange	 4497878 Inst H.– Frame Front H.
H-90 White	 11 10 9 8 7 6 5 4 3 2 1 22 21 20 19 18 17 16 15 14 13 12 4498385 Inst H.– Frame Front H.

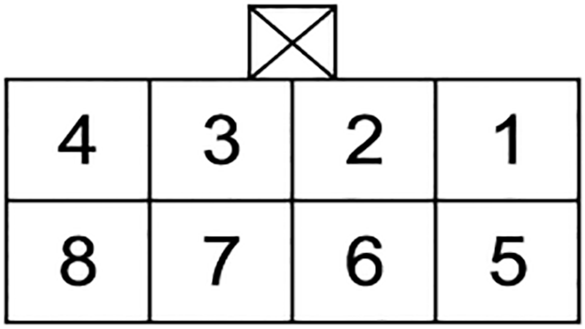
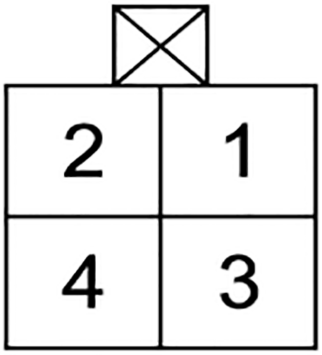
No.	Connector Face	No.	Connector Face
H-90 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 4498387 Inst H.– Frame Front H.	H-91 Gray	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 4498387 Inst H.– Frame Front H.
H-91 Gray	 11 10 9 8 7 6 5 4 3 2 1 22 21 20 19 18 17 16 15 14 13 12 4498385 Inst H.– Frame Front H.	H-92 Black	 4 3 2 1 10 9 8 7 6 5 16 15 14 13 12 11 4498399 Inst H.– Door (LH) H.

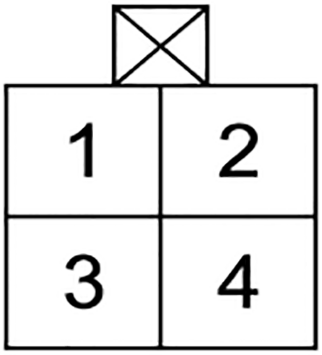
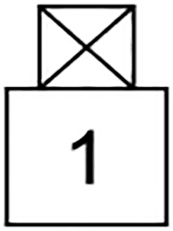
No.	Connector Face
H-92 Black	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 4498404 Inst H.–Door (LH) H.
H-93 White	 4 3 2 1 10 9 8 7 6 5 4498380 Inst H.– Floor (LH) H. MT AT

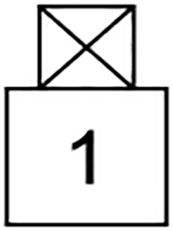
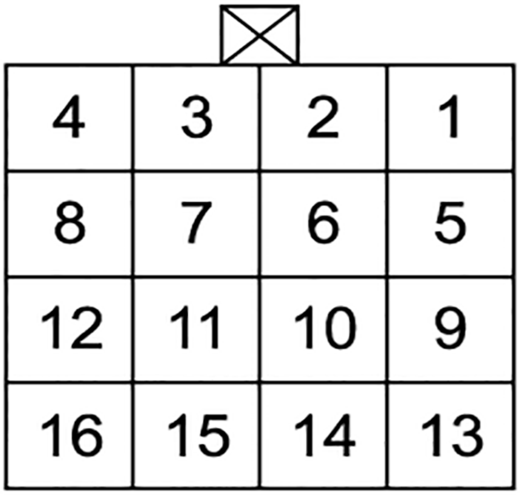
No.	Connector Face
H-93 White	 1 2 3 4 5 6 7 8 9 10 4497867 Inst H.– Floor (LH) H. MT AT
H-101 Black	 4 3 2 1 8 7 6 5 12 11 10 9 16 15 14 13 20 19 18 17 24 23 22 21 28 27 26 25 32 31 30 29 4498392 Frame Front H.– Frame Rear H.

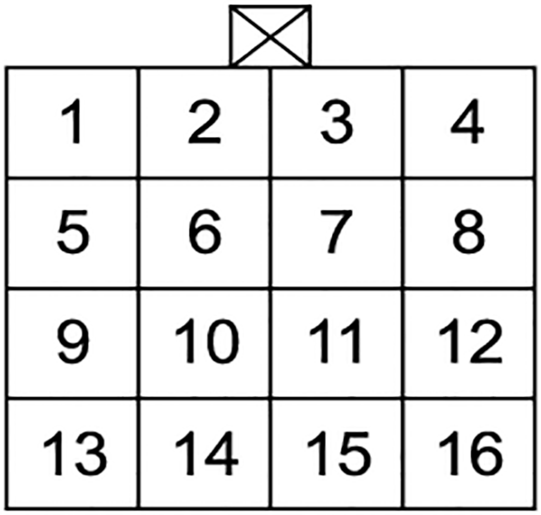
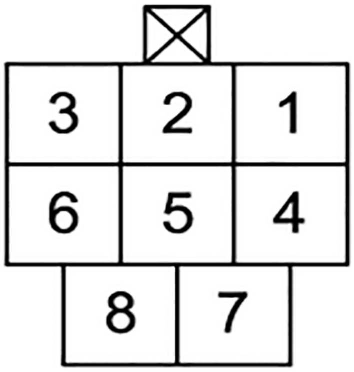
No.	Connector Face	No.	Connector Face
H-101 Black	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 4498395 Frame Front H.– Frame Rear H.	H-104 Black	 K J H G F A B C D E 4498397 Frame Rear H.– PTO2 H.
H-104 Black	 F G H J K E D C B A 4498396 Frame Rear H.– PTO2 H.	H-105 Black	 4498401 Frame Rear H.– PTO1 H.

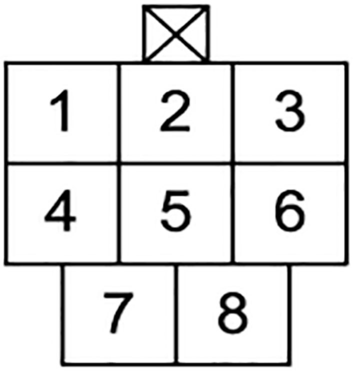
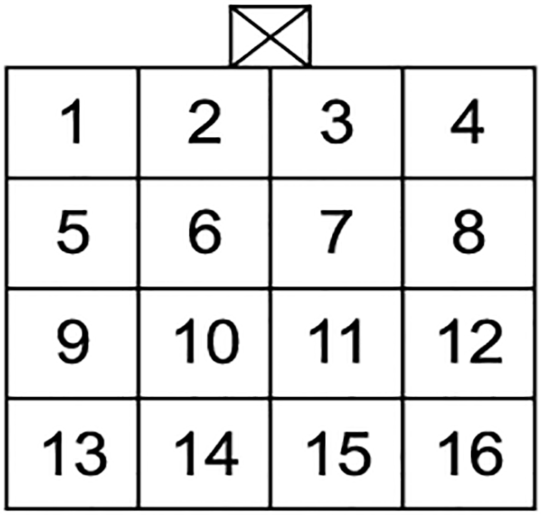
No.	Connector Face
H-105 Black	 4498405 Frame Rear H.– PTO1 H.
H-168 Black	 4498005 Engine H. – Glow H.

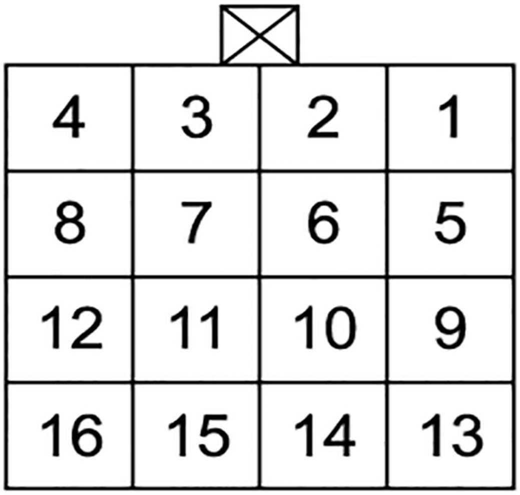
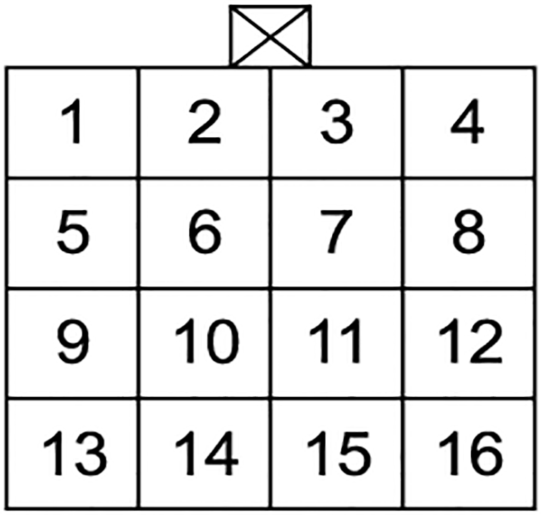
No.	Connector Face
H-168 Black	 4498424 Engine H. – Glow H.
H-169 Light Gray	 4498425 Engine H. – Glow H.

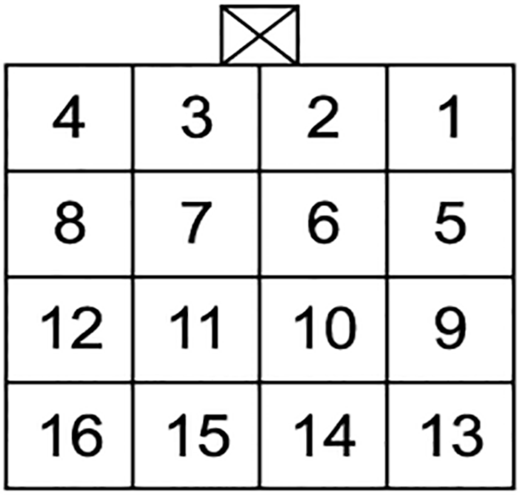
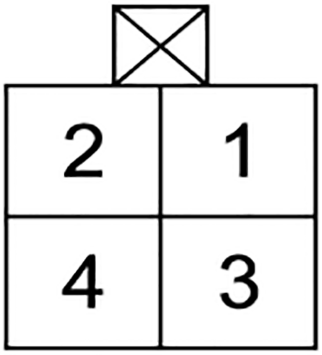
No.	Connector Face
H-169 Light Gray	 4497861 Engine H. – Glow H.
H-170 Gray	 4498047 INST H. – Frame H.

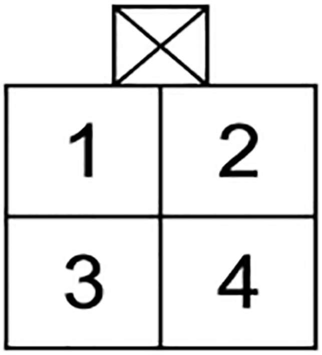
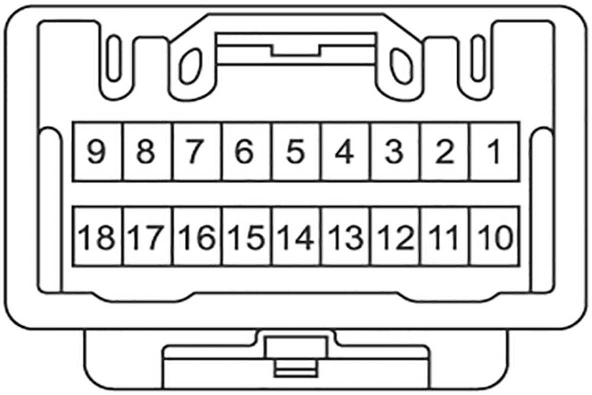
No.	Connector Face
H-170 Gray	 4498047 INST H. – Frame H.
H-171 Black	 4 3 2 1 8 7 6 5 12 11 10 9 16 15 14 13 4498347 Frame H. – SCR EXT H.

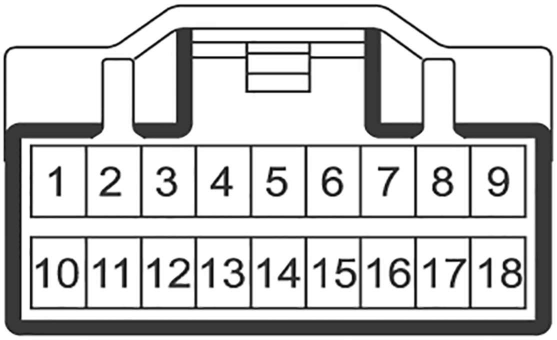
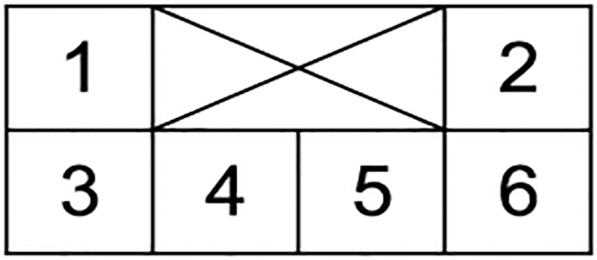
No.	Connector Face
H-171 Black	 4498351 Frame H. – SCR EXT H.
H-172 Black	 4498419 Frame H. – Towing H.

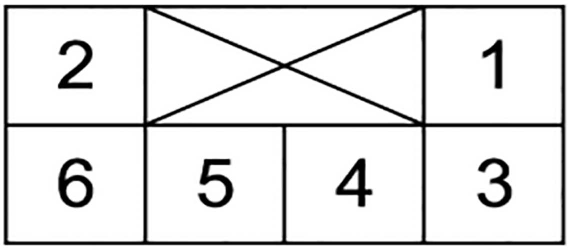
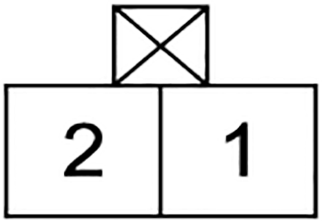
No.	Connector Face
H-172 Black	 4498422 Frame H. – Towing H.
H-173 Black	 4498351 Frame H. – Dosing EXT H.

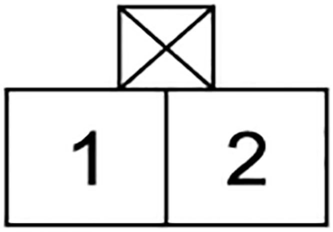
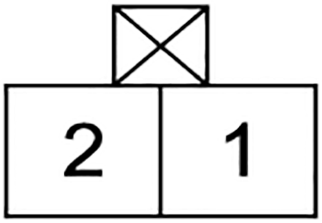
No.	Connector Face
H-173 Black	 4 3 2 1 8 7 6 5 12 11 10 9 16 15 14 13 4498347 Frame H. – Dosing EXT H.
H-176 Black	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 4498351 Frame H. – EXT SCR TEMP H.

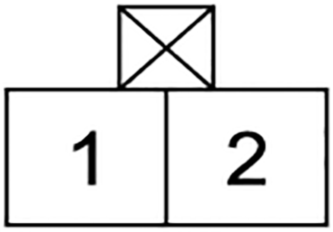
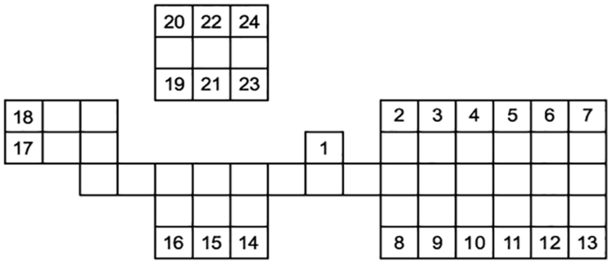
No.	Connector Face
H-176 Black	 4 3 2 1 8 7 6 5 12 11 10 9 16 15 14 13 4498347 Frame H. – EXT SCR TEMP H.
H-177 Black	 4498417 Frame H. – Trans H.

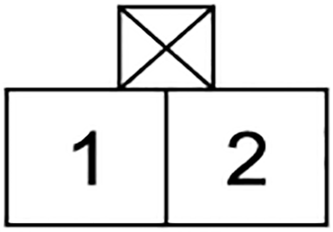
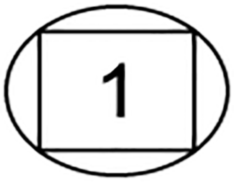
No.	Connector Face
H-177 Black	 4497861 Frame H. – Trans H.
H-195 White	 9 8 7 6 5 4 3 2 1 18 17 16 15 14 13 12 11 10 4498431 INST H. – EXT Tacho H.

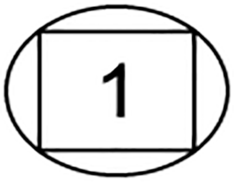
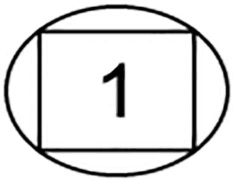
No.	Connector Face
H-195 White	 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 4498433 INST H. – EXT Tacho H.
H-234 (White)	 4497878 EXT Telematics

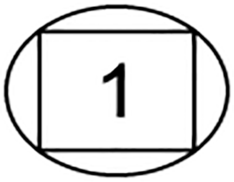
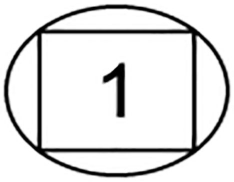
No.	Connector Face
H-234 (White)	 4498340 EXT Telematics
H-241 (Black)	 4498353 Speed Sensor RR-LH – Wheel Speed Sensor RR_LH

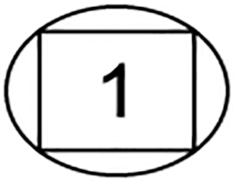
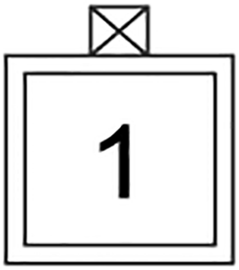
No.	Connector Face
H-241 (Black)	 4497871 Speed Sensor RR-LH – Wheel Speed Sensor RR_LH
H-242 (Black)	 4498353 Speed Sensor RR-RH – Wheel Speed Sensor RR_RH

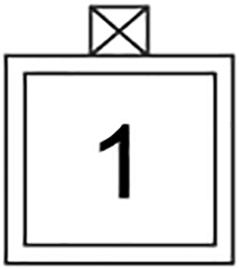
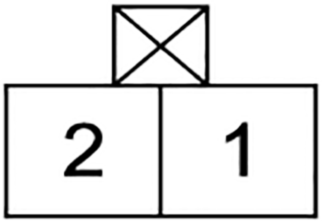
No.	Connector Face
H-242 (White)	 4497871 Speed Sensor RR-RH – Wheel Speed Sensor RR_RH
J-2	 20 22 24 19 21 23 18 17 1 2 3 4 5 6 7 16 15 14 8 9 10 11 12 13 4498435 Relay Box

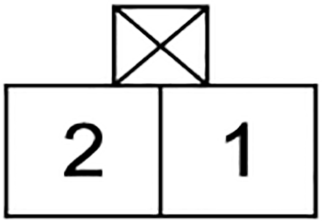
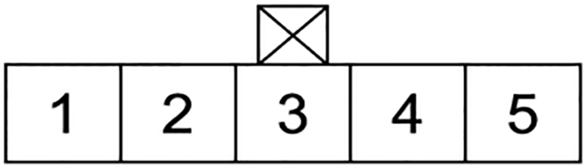
No.	Connector Face
J-4 Gray	 4497871 Condenser Fan
J-7	 4497888 Earth Body 10

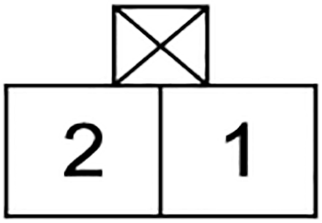
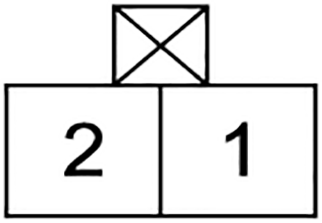
No.	Connector Face
J-8	 Earth Body 11
J-9	 Earth Body 12

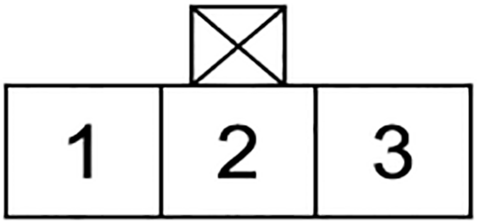
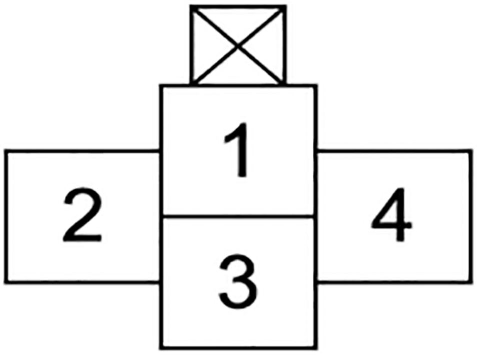
No.	Connector Face
J-10	 Earth Body 13
J-12	 Earth Body 4

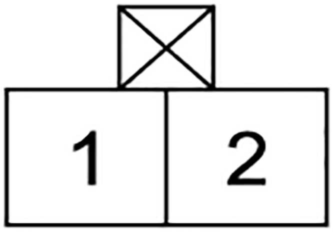
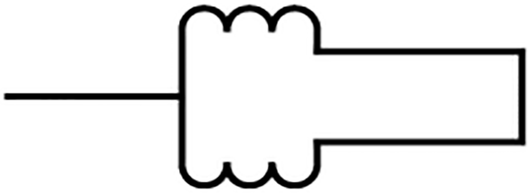
No.	Connector Face
J-13	 Earth Body 5
J-14	The final page of connector list
J-19 White	 Horn (LH)

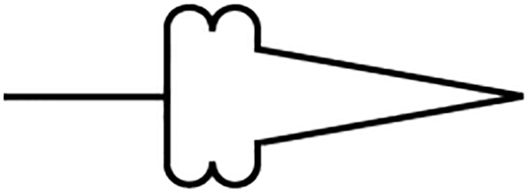
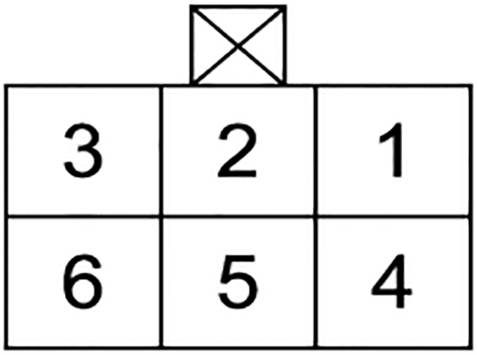
No.	Connector Face
J-20 White	 Horn (RH)
J-22	The final page of connector list
J-34 Gray	 Exhaust Gas Temperature Sensor 1

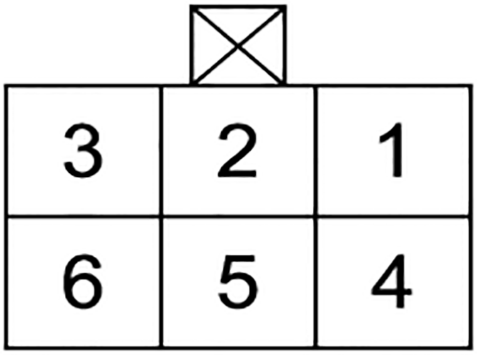
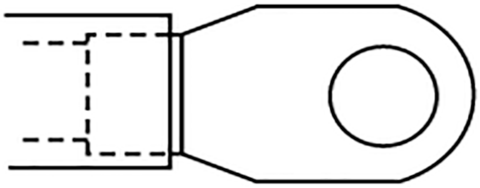
No.	Connector Face
J-35 Gray	 4498353 Exhaust Gas Temperature Sensor 2
J-38 Black	 4498169 MAF and IAT 1 Sensor

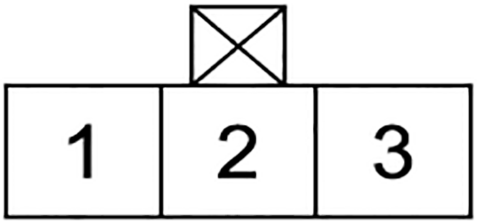
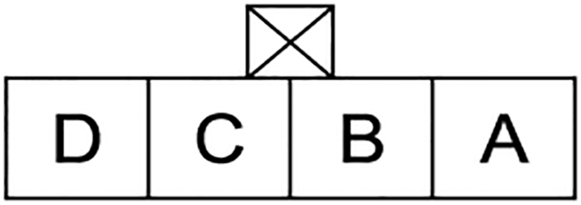
No.	Connector Face
J-44 Black	 4498353 Wheel Speed Sensor Front Left
J-45 Black	 4498353 Wheel Speed Sensor Front Right

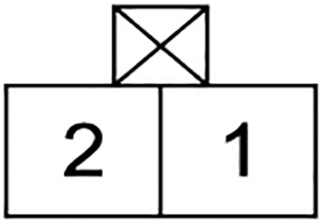
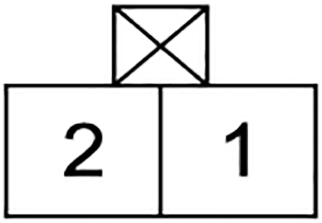
No.	Connector Face
J-48 Gray	 4497982 Vehicle Speed Sensor
J-55 White	 4498463 Triple Pressure Switch

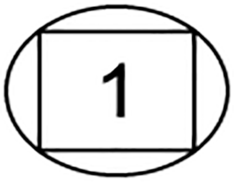
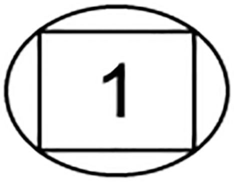
No.	Connector Face
J-59 Black	 4497871 Exhaust Brake Solenoid Valve
J-71 Green	 4498465 License Plate Light (A)

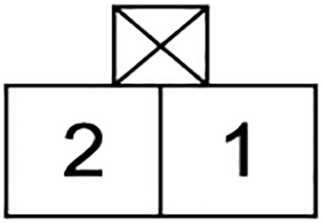
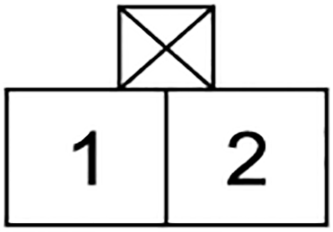
No.	Connector Face
J-72 Green	 4498467 License Plate Light (B)
J-73 White	 4498462 Rear Combination Light (LH)

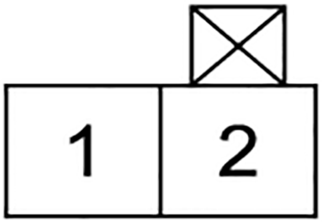
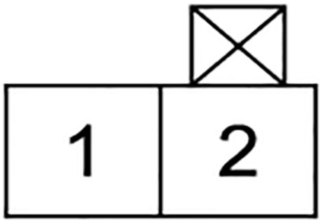
No.	Connector Face
J-74 White	 4498462 Rear Combination Light (RH)
J-100	 4498317 Starter (D)

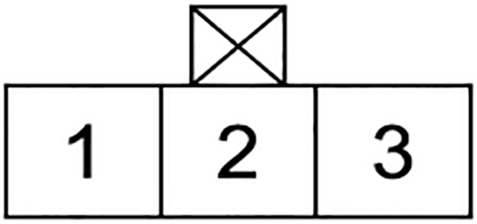
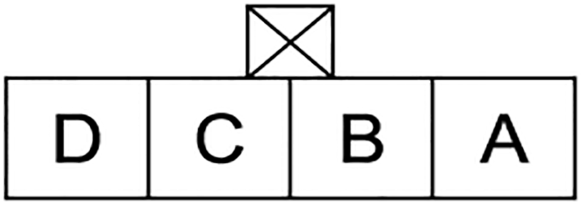
No.	Connector Face
J-102 Black	 4497982 Exhaust Differential Pressure Sensor
J-104 Black	 4498464 Front Manufacture Connector

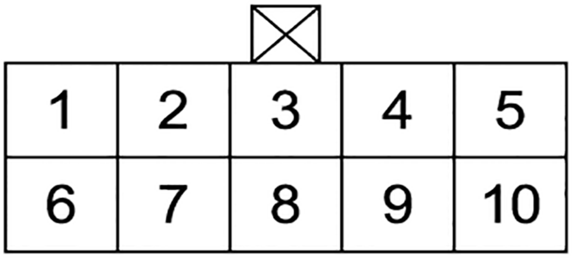
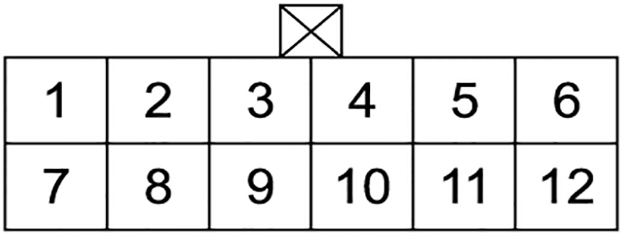
No.	Connector Face
J-107 Black	 4498353 Wheel Speed Sensor Front Right
J-108 Black	 4498353 Wheel Speed Sensor Front Left

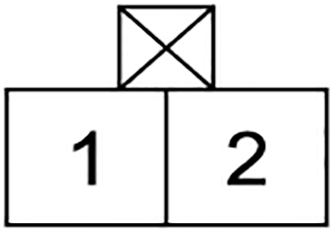
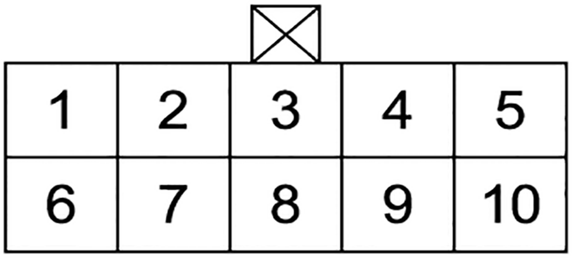
No.	Connector Face
J-109	 4497888 Earth Body 14
J-110	 4497888 Earth Body 20

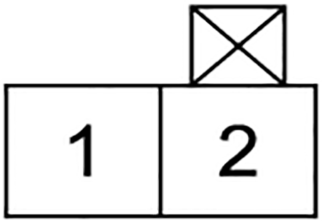
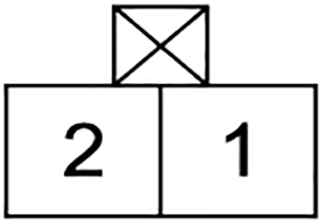
No.	Connector Face
J-111 Black	 4498353 Back Buzzer (Upfitter Install)
J-112 White	 4497871 ATF Temperature Sensor (Torque Converter Clutch)

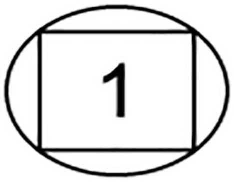
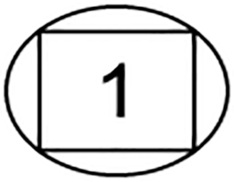
No.	Connector Face
J-113 Black	 Diode 3
J-114 Black	 Diode 1

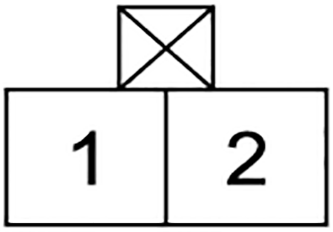
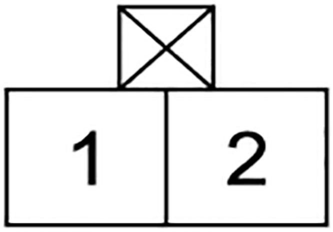
No.	Connector Face
J-117 Black	 1 2 3 4497982 Fuel Tank Unit In
J-118 Black	 D C B A 4498464 Rear Manufacture Connector

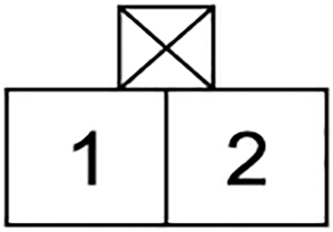
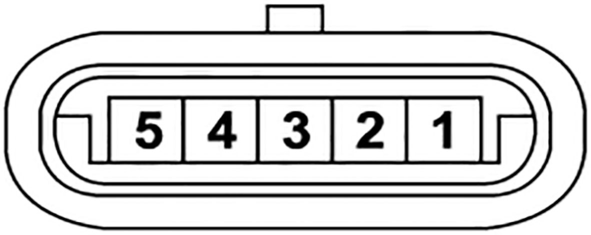
No.	Connector Face
J-119 Gray	 1 2 3 4 5 6 7 8 9 10 4497881 Frame Front H.– TM Solenoid1
J-120 Black	 1 2 3 4 5 6 7 8 9 10 11 12 4497869 Frame Front H.– TM Solenoid2

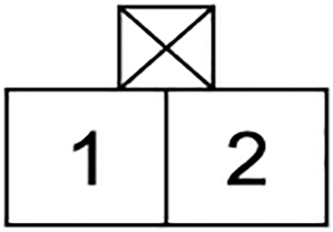
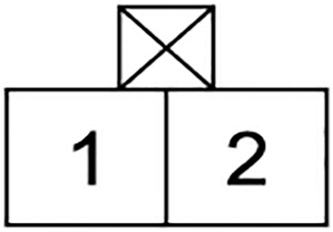
No.	Connector Face
J-121 Blue	 4497871 Frame Front H.– TM Speed
J-122 Black	 1 2 3 4 5 6 7 8 9 10 4497881 Frame Front H.– TM NSSW

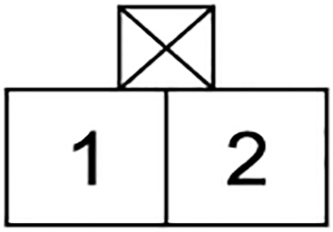
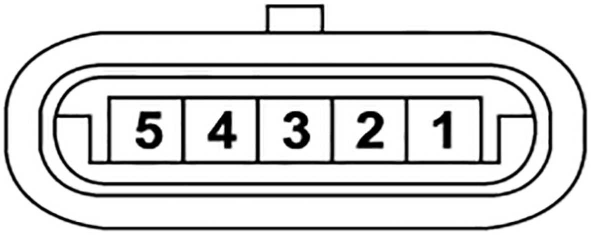
No.	Connector Face
J-135 Black	 4497979 Diode 2
J-137 Black	 4498353 Rear Body Connector

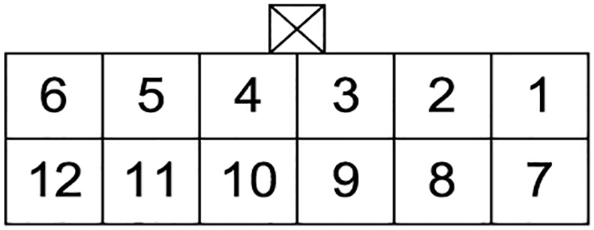
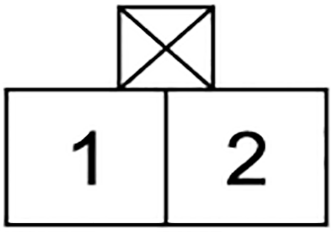
No.	Connector Face
J-141	 4497888 Earth Body SCR 1
J-142	 4497888 Earth Body SCR 2
J-143	The final page of connector list
J-144	The final page of connector list

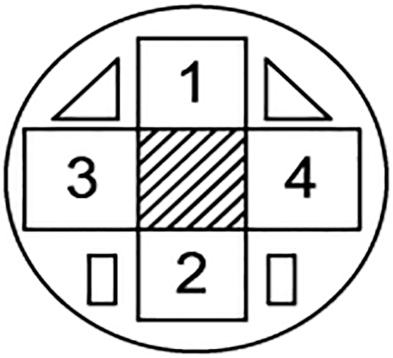
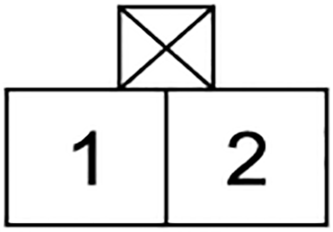
No.	Connector Face
J-145 Dark Gray	 4497871 Charge Air Cooler (CAC) Temperature Sensor 1
J-146 Dark Gray	 4497871 Charge Air Cooler (CAC) Temperature Sensor 2

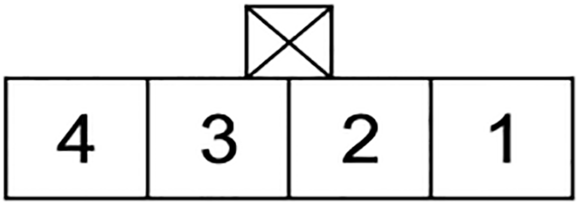
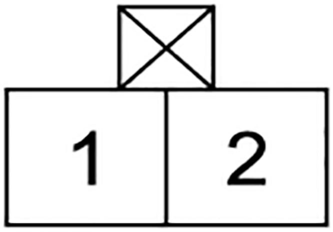
No.	Connector Face
J-147 Blue	 4497871 Air Cleaner Switch
J-148 Blue	 4498482 NOx Sensor 1

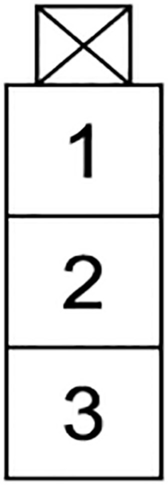
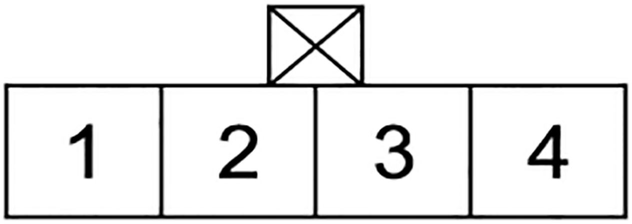
No.	Connector Face
J-149 Black	 4497871 Diesel Exhaust Fluid (DEF) Injector
J-162 Black	 4497871 Resistor

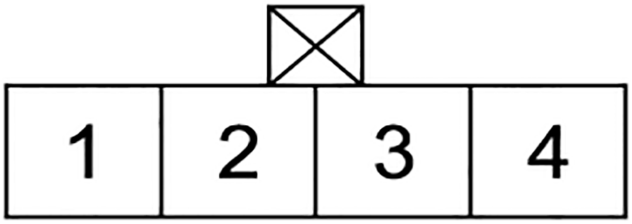
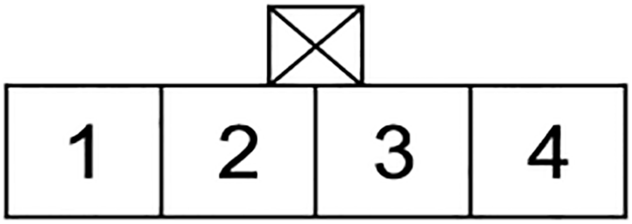
No.	Connector Face
J-163 Black	 4497871 Exhaust Gas Temperature (EGT) Sensor 3
J-164 Black	 4498482 NOx Sensor 2

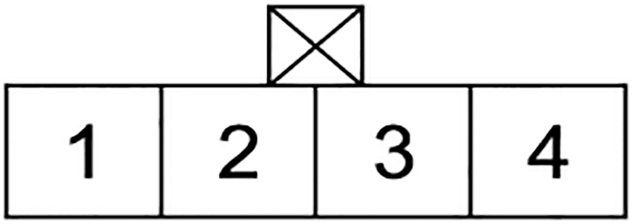
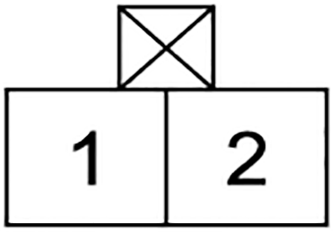
No.	Connector Face
J-165 Black	 4498483 Diesel Exhaust Fluid (DEF) Pump
J-166 Gray	 4497871 Diesel Exhaust Fluid (DEF) Tank Heater Coolant Control Valve

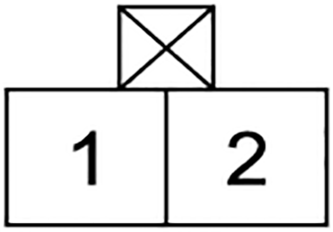
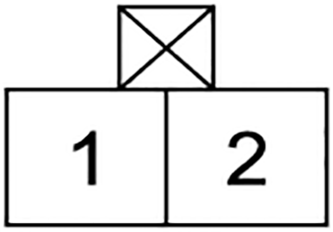
No.	Connector Face
J-167 Black	 4498489 Diesel Exhaust Fluid (DEF) Tank Level & Temperature Sensor
J-168 Blue	 4497871 Input Shaft Speed (ISS) Sensor

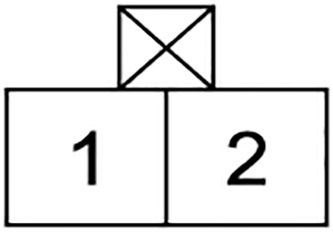
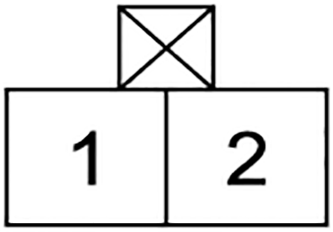
No.	Connector Face
J-204 Black	 4498494 PM Sensor
J-241 Black	 4497871 Fuel Heater

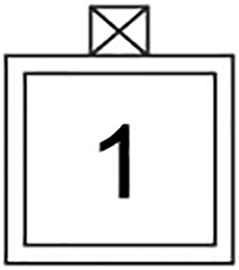
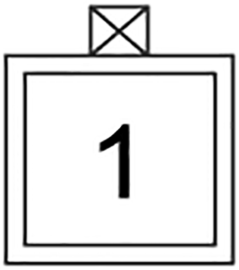
No.	Connector Face
L-4 White	 4498499 Dome Light
L-20 White	 4498036 J/C 3

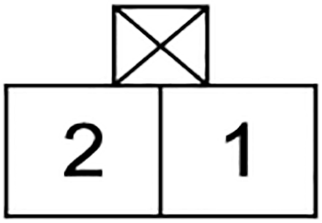
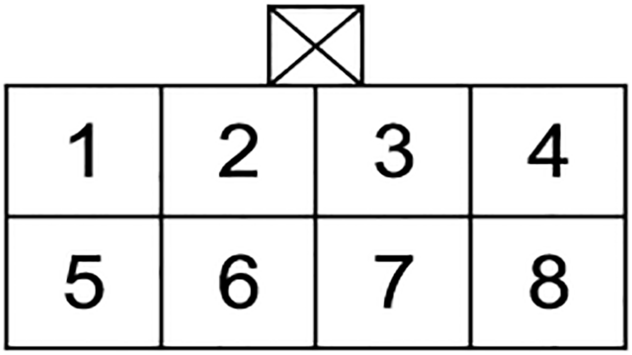
No.	Connector Face
L-21 White	 4498036 J/C 4
L-22 White	 4498036 J/C 5

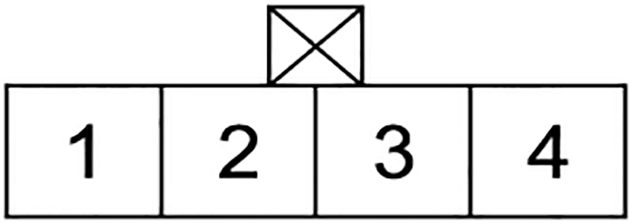
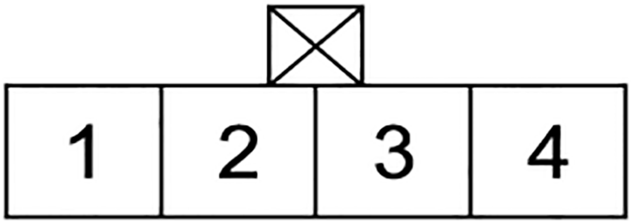
No.	Connector Face
L-23 White	 4498036 J/C 7
L-24 White	 4497871 Marker 1

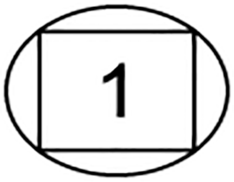
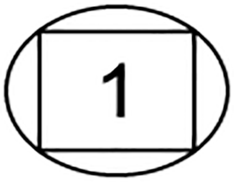
No.	Connector Face
L-25 White	 4497871 Marker 2
L-26 White	 4497871 ID 1

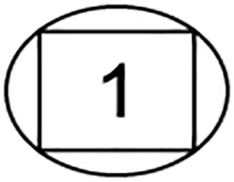
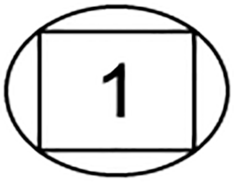
No.	Connector Face
L-27 White	 4497871 ID 2
L-28 White	 4497871 ID 3

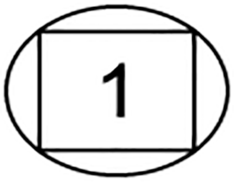
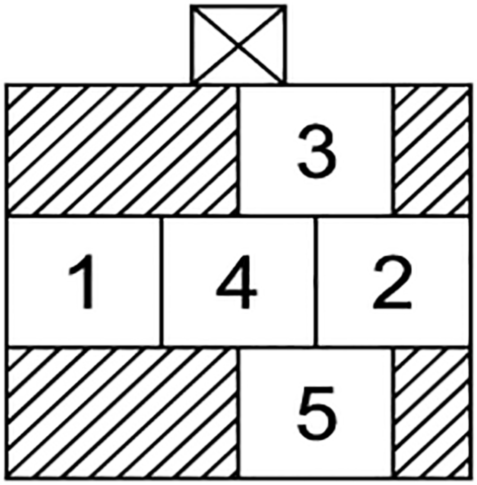
No.	Connector Face
N-7 White	 4497887 Door Switch (RH)
N-12 White	 4497887 Door Switch (LH)

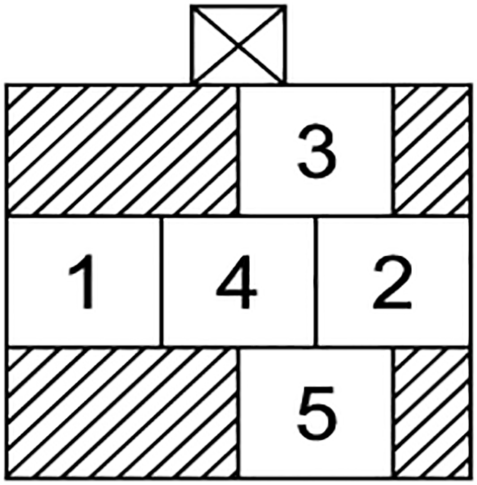
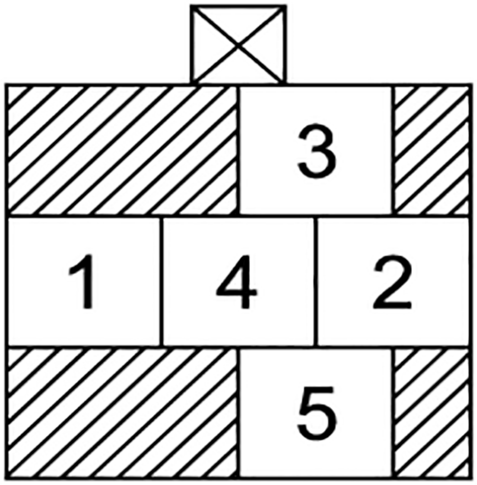
No.	Connector Face
N-14 White	 4498353 Parking Brake Switch
N-16 White	 4498005 Shift Lever

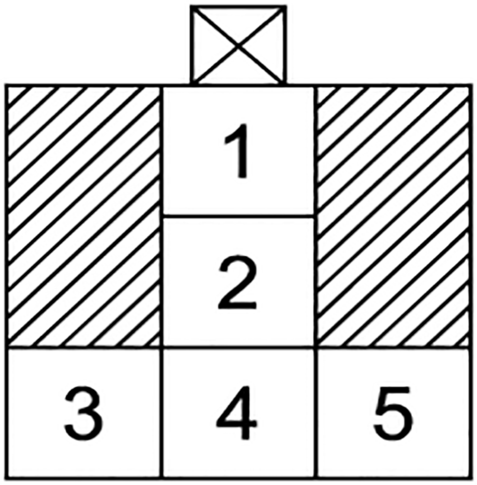
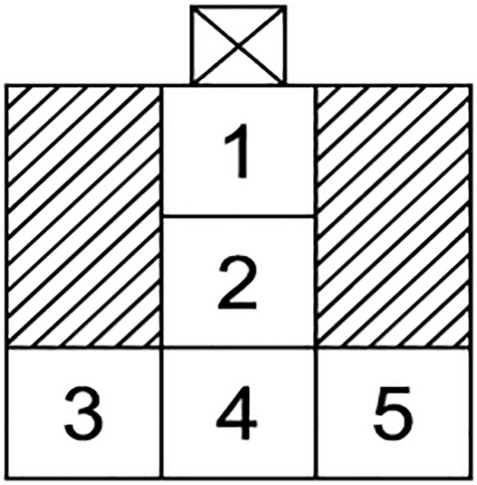
No.	Connector Face
N-19 White	 4498036 J/C – 1
N-30 White	 4498036 Overdrive Off Switch

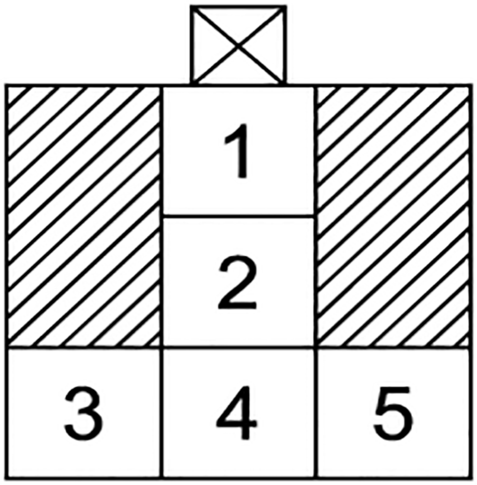
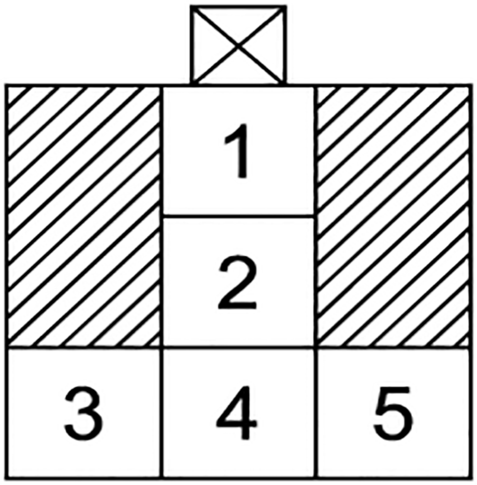
No.	Connector Face
P-1	 4497888 Battery (+)
P-2	 4497888 Battery (-)

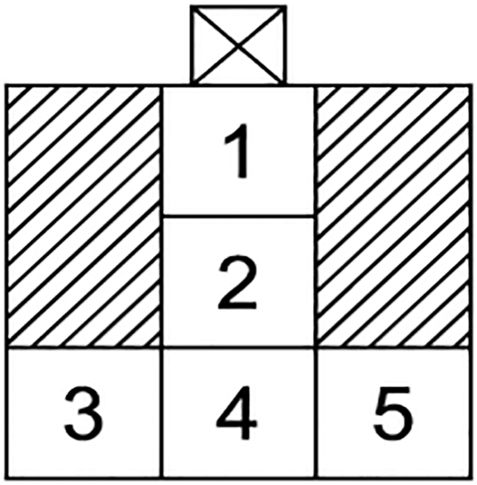
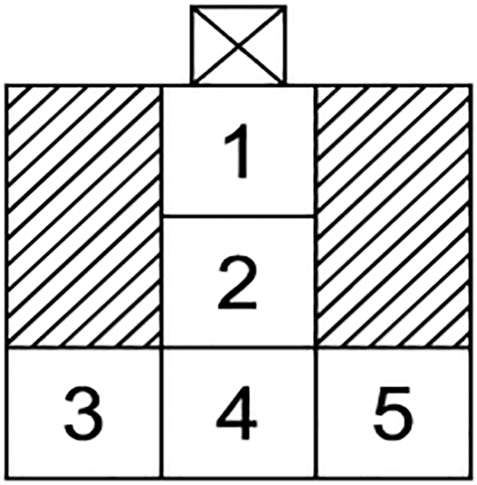
No.	Connector Face
P-3	 4497888 Battery (+)
P-4	 4497888 Battery (-)

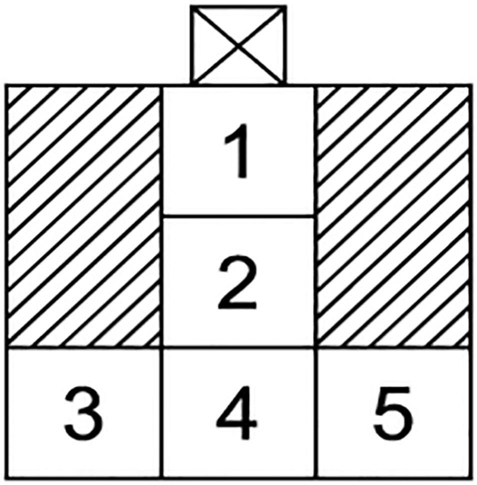
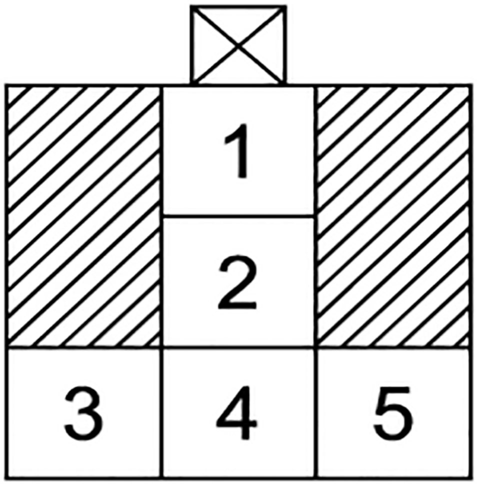
No.	Connector Face
P-5	 4497888 Battery Earth
X-1 White	 4498540 Stoplight Relay

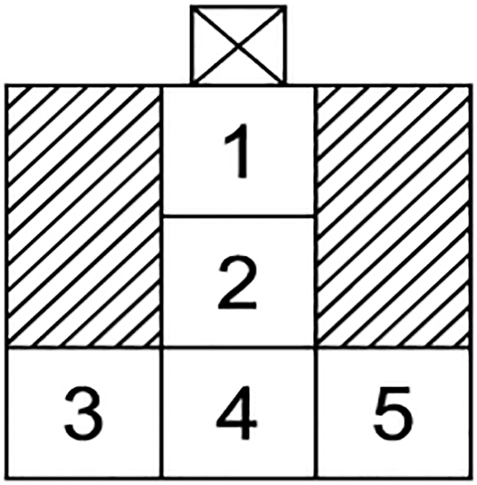
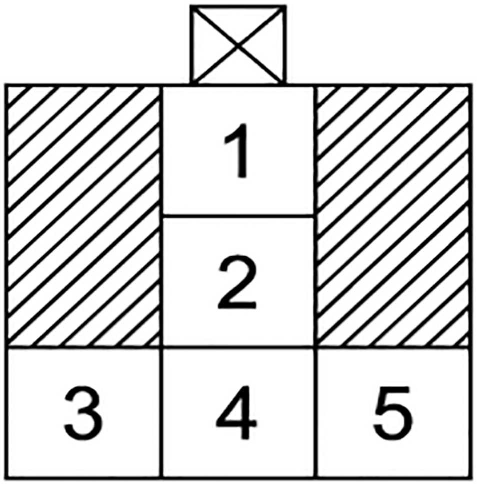
No.	Connector Face
X-2 White	 4498540 DRL Relay
X-3 White	 4498540 Key On Relay

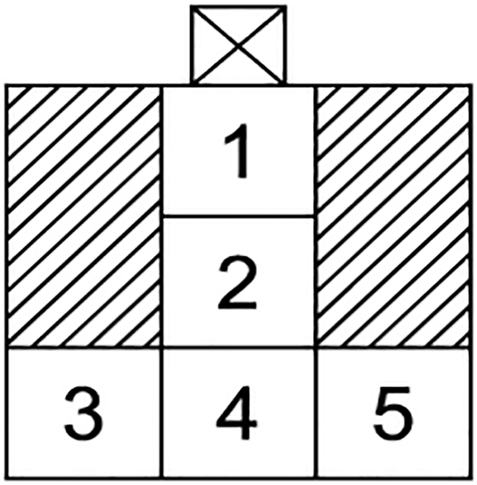
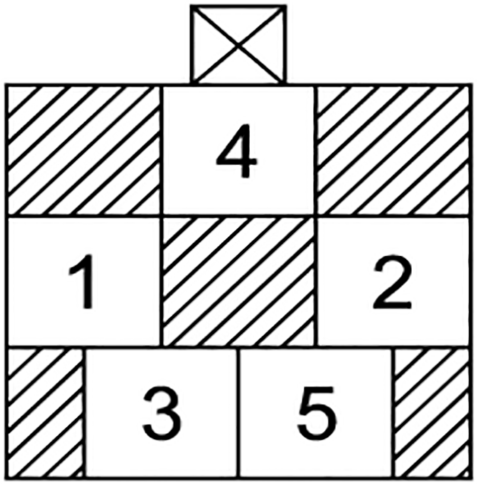
No.	Connector Face
X-4 White	 4498012 TCM Relay
X-5 White	 4498012 P/N Start Relay

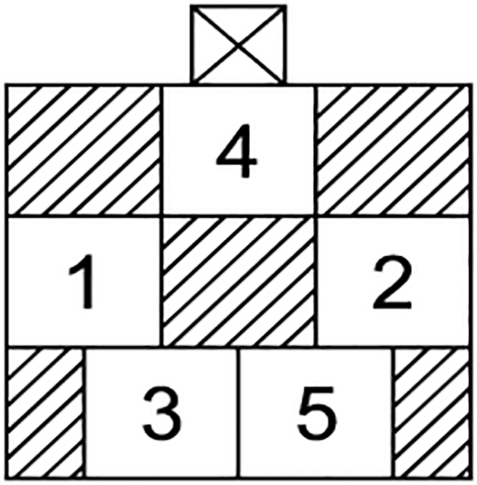
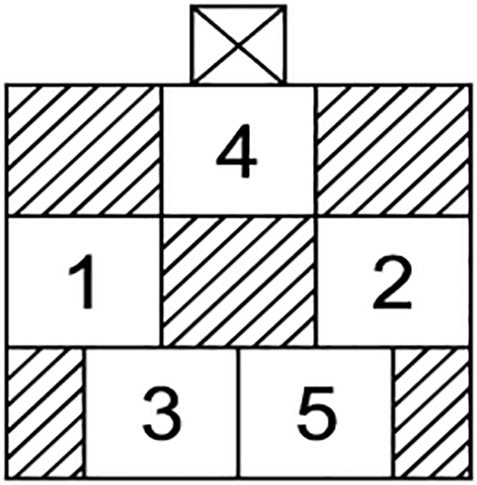
No.	Connector Face
X-6 White	 4498012 Wiper Main Relay
X-7 White	 4498012 Horn Relay

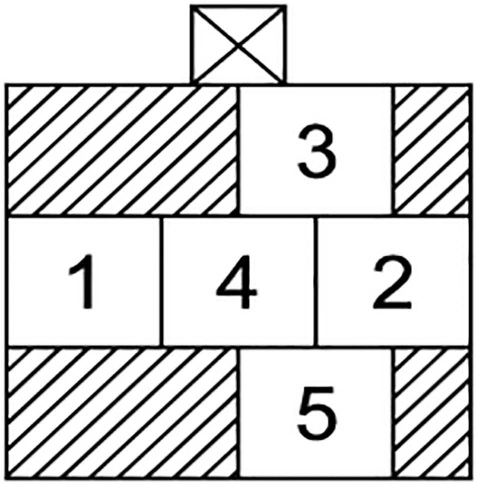
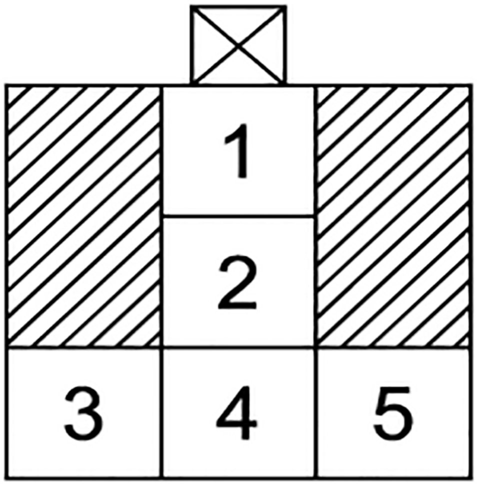
No.	Connector Face
X-8 White	 4498012 Wiper Hi/Lo Relay
X-9 White	 4498012 Trailer Stop Relay

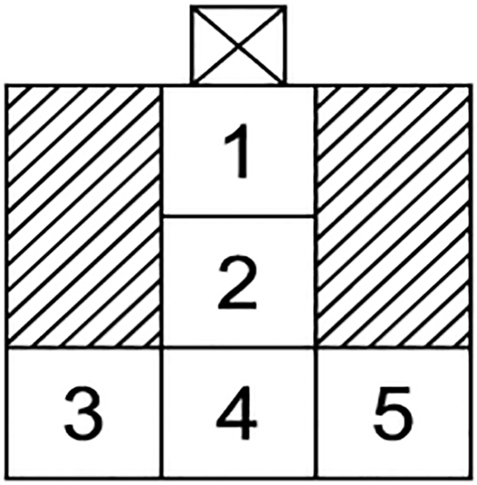
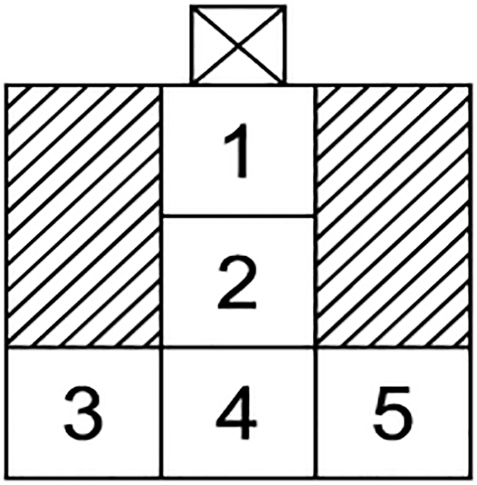
No.	Connector Face
X-12 White	 4498012 Front Power Window Relay
X-13 White	 4498012 Headlight (Lo) Relay

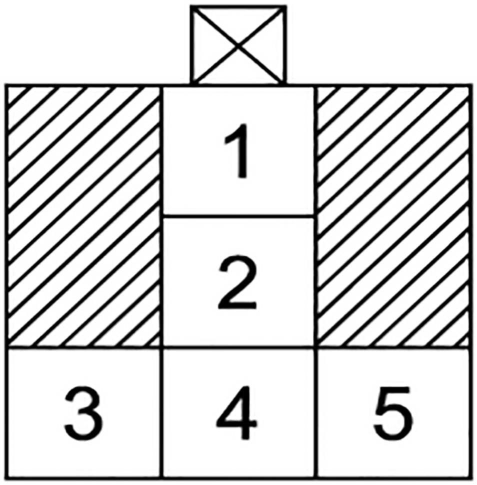
No.	Connector Face
X-14 White	 4498012 Vacuum Pump Relay
X-15 White	 4498012 Headlight (Hi) Relay

No.	Connector Face
X-16 White	 4498012 Tail Light Relay
X-17 Gray	 4498548 Starter Relay

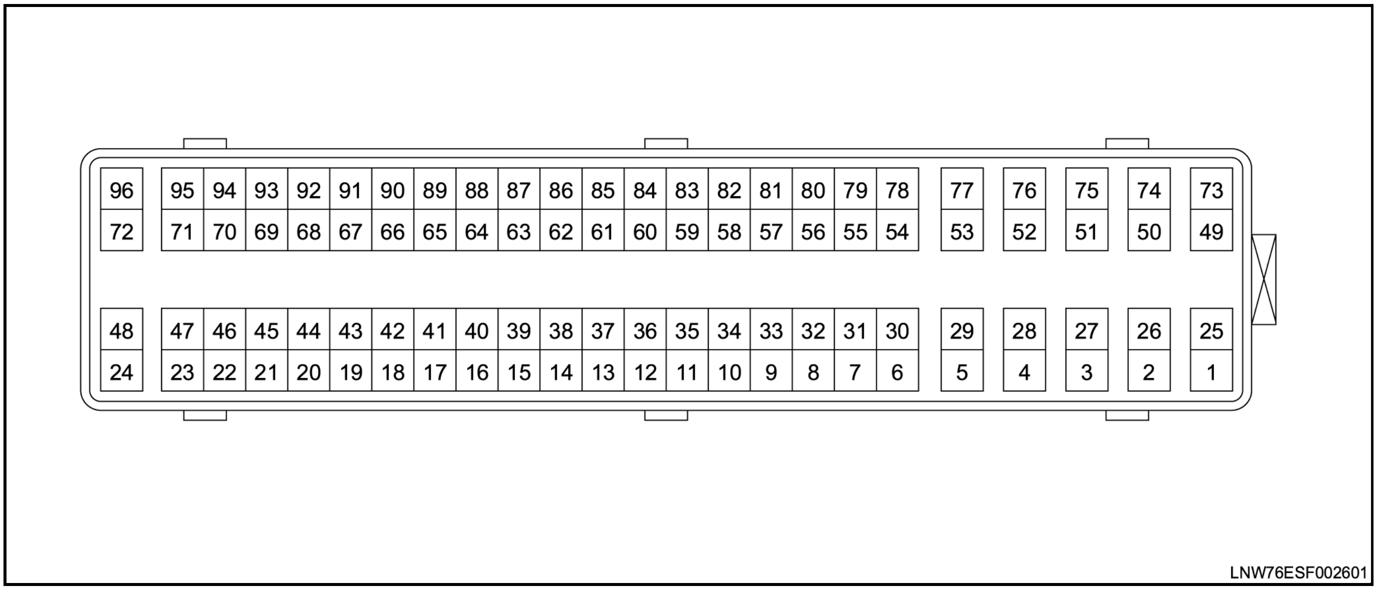
No.	Connector Face
X-18 Black	 4498548 PM Sensor Relay
X-19 Black	 4498548 NOx & Diesel Exhaust Fluid (DEF) Sensor Relay

No.	Connector Face
X-20 Gray	 4498540 Magnetic Clutch Relay
X-21 Gray	 4498012 Condenser Fan Relay

No.	Connector Face
X-23 Gray	 4498012 Heater Valve
X-26 Black	 4498012 Marker Light Relay

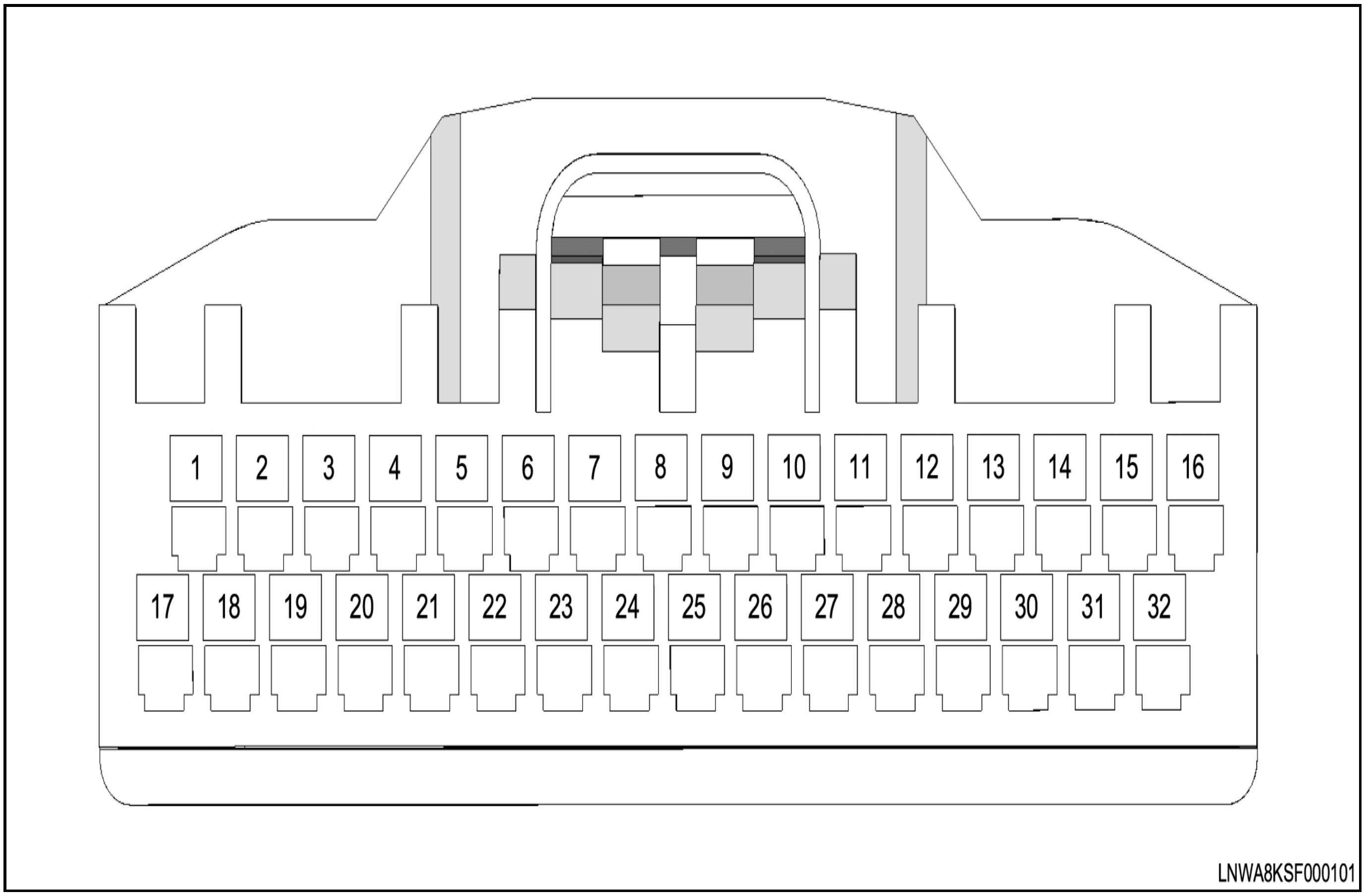
No.	Connector Face
X-30 Black	 4498012 Fuel Heater Relay

E-12 (Black)/ J-14 (Black) ECM


96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73
72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49
48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25
24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
LNW76ESF002601

4498553

B-451 (Gray) FMS CAN Interface Control Unit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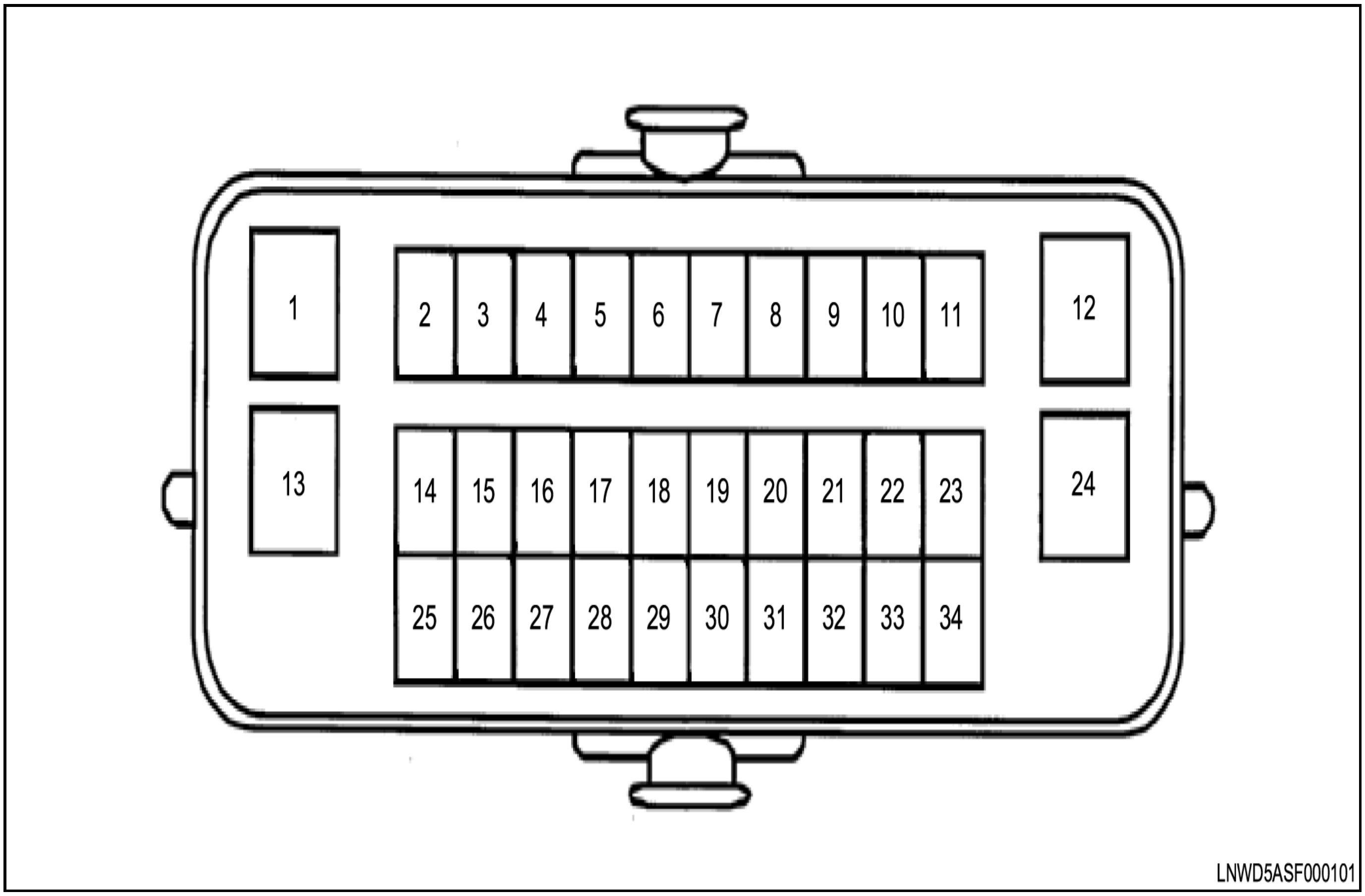
LNWA8KSF000101

4498554

J-22 (Black) EHCU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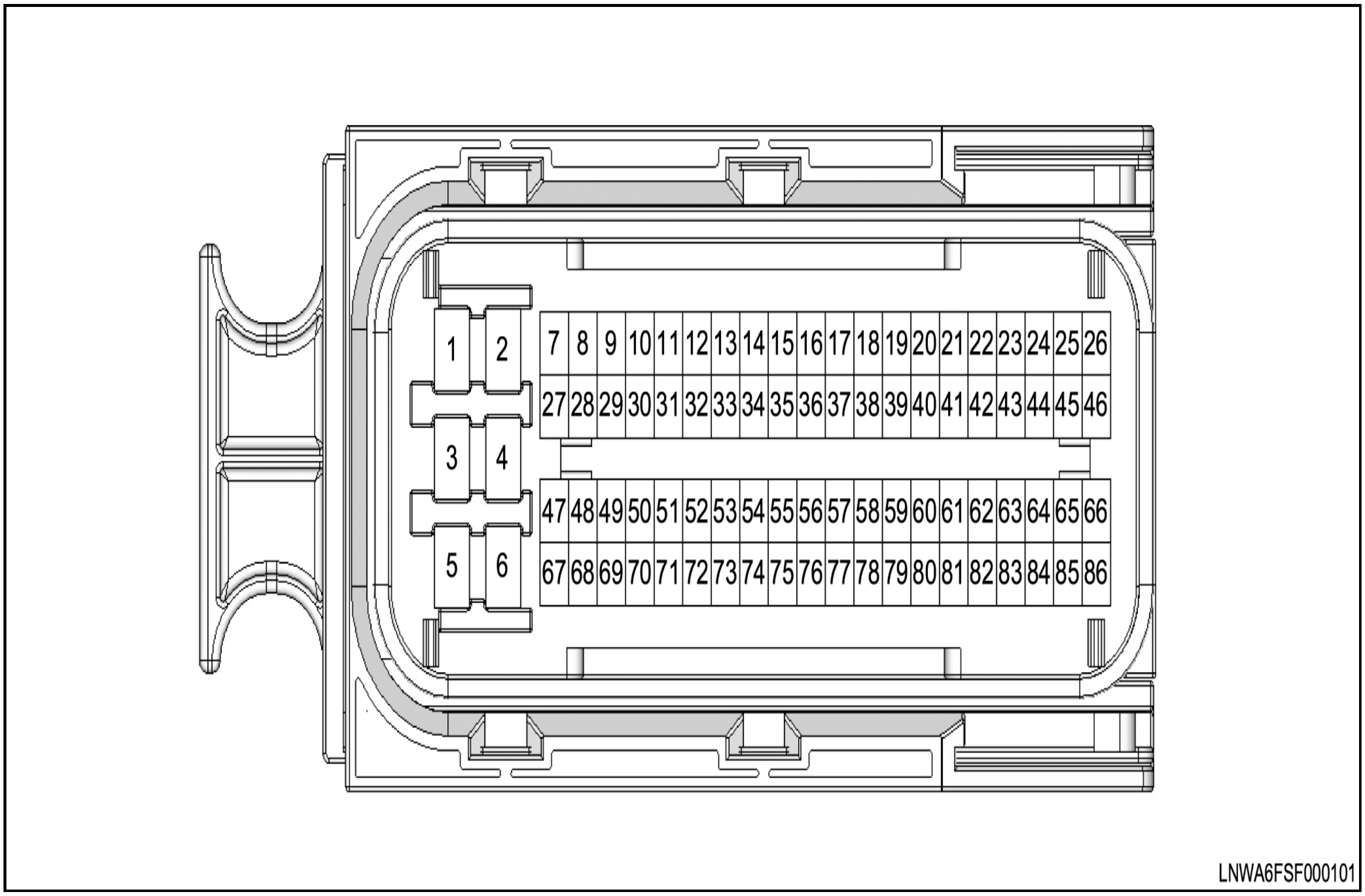
LNWD5ASF000101

4498599

J-143 (Black) Diesel Exhaust Fluid (DEF) Control Module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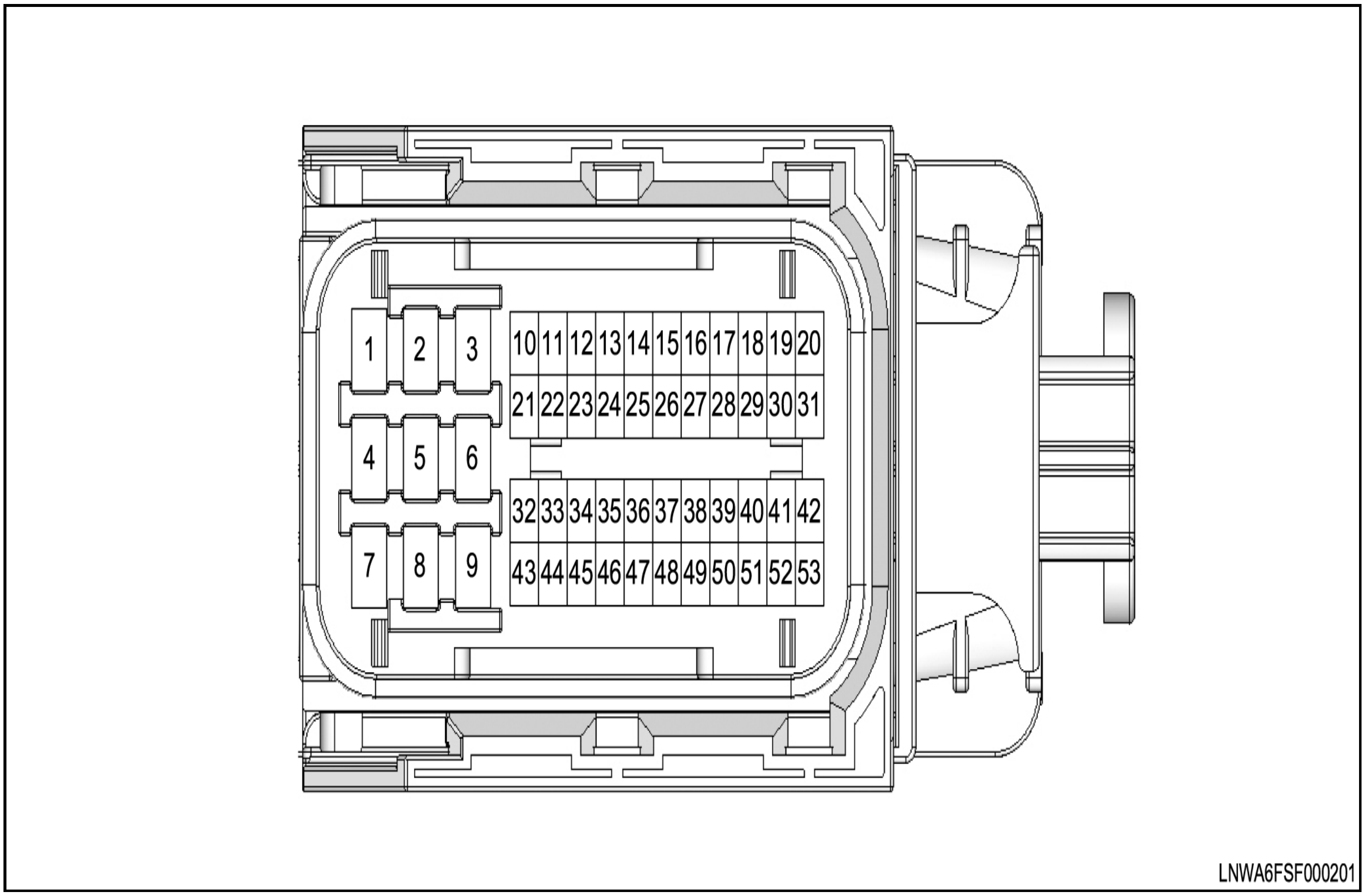
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66
67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86
LNWA6FSF000101

4498686

J-144 (Black) Diesel Exhaust Fluid (DEF) Control Module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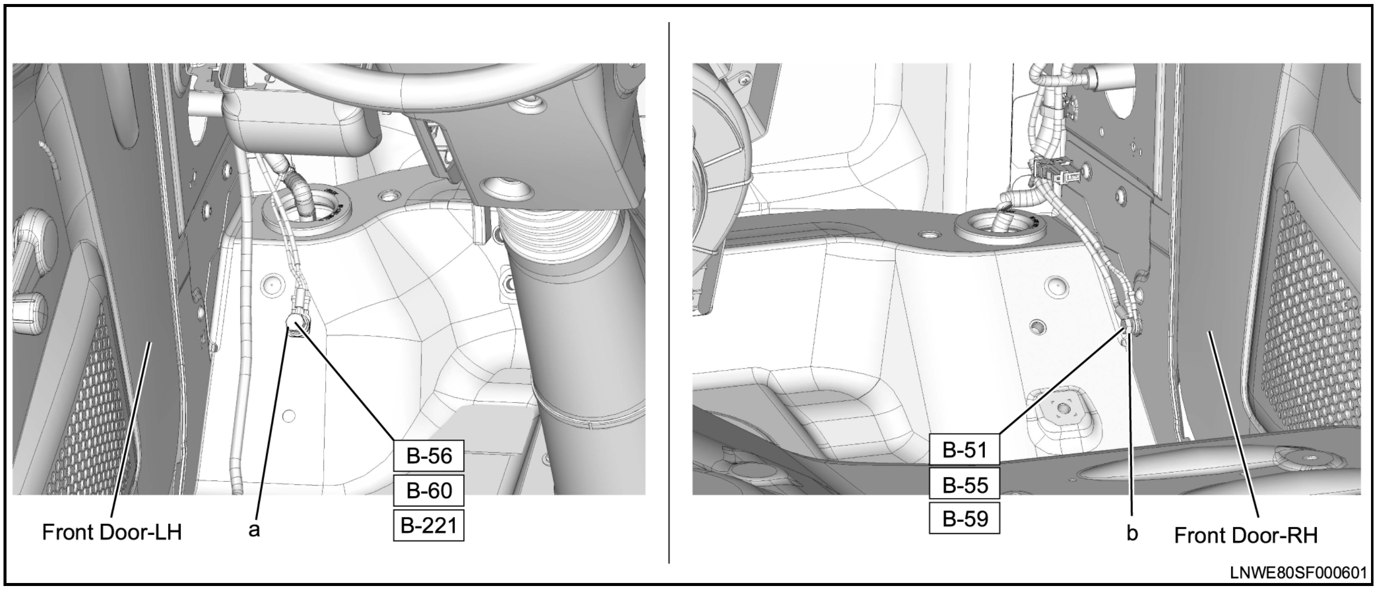
10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31
32 33 34 35 36 37 38 39 40 41 42
43 44 45 46 47 48 49 50 51 52 53
LNWA6FSF000201

4498694

Component Locator

Ground Views

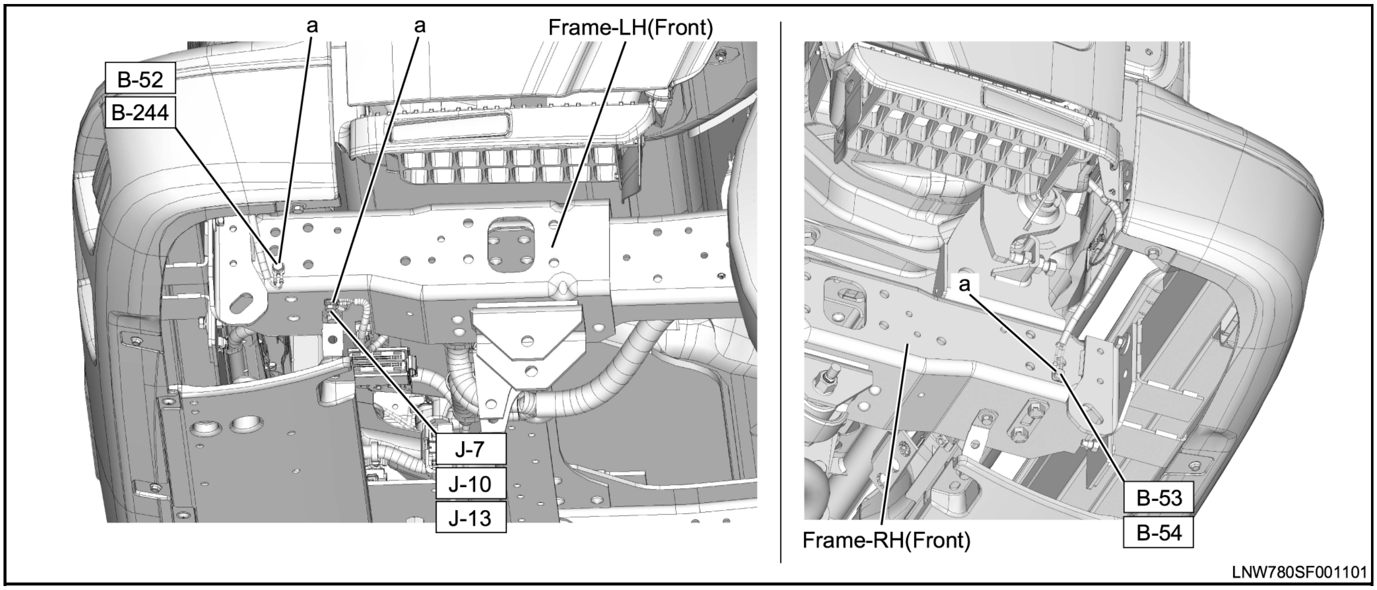

B-56
B-60
B-221
Front Door-LH
a
B-51
B-55
B-59
b
Front Door-RH
LNWE80SF000601

4496012

Legend

(a) 20 N•m (15 lb·ft)

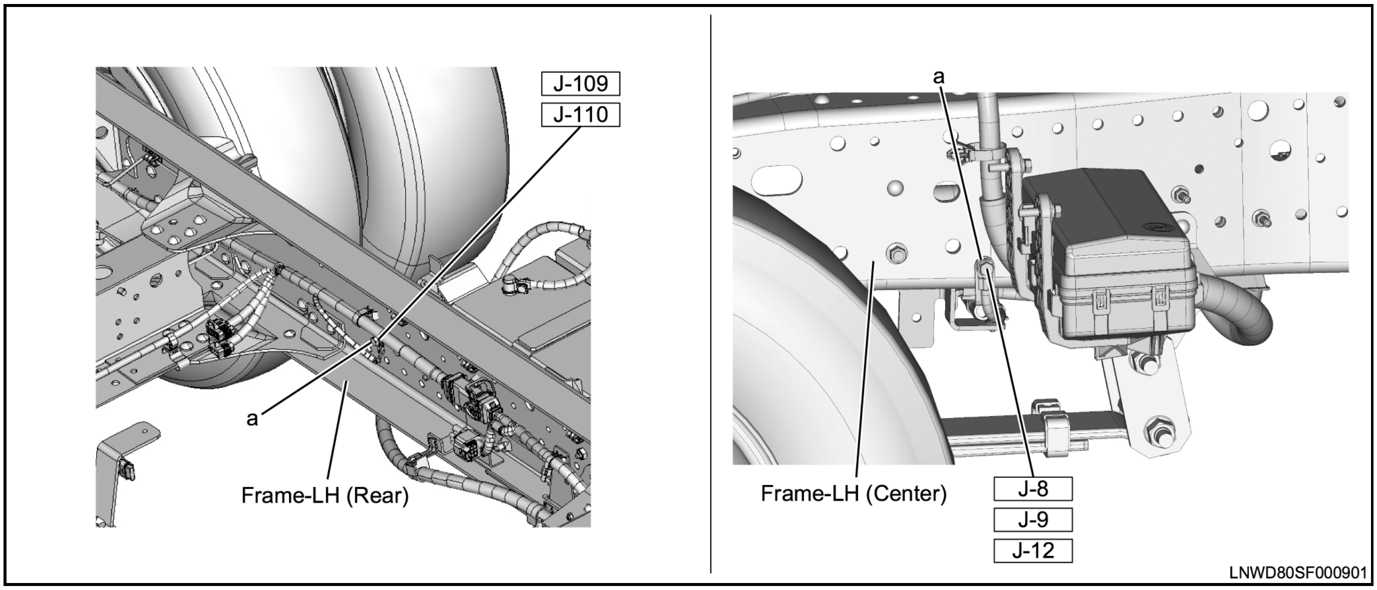
(b) 8 N•m (71 lb·in)


a
a
Frame-LH(Front)
B-52
B-244
J-7
J-10
J-13
a
B-53
B-54
Frame-RH(Front)
LNW780SF001101

4496031

Legend

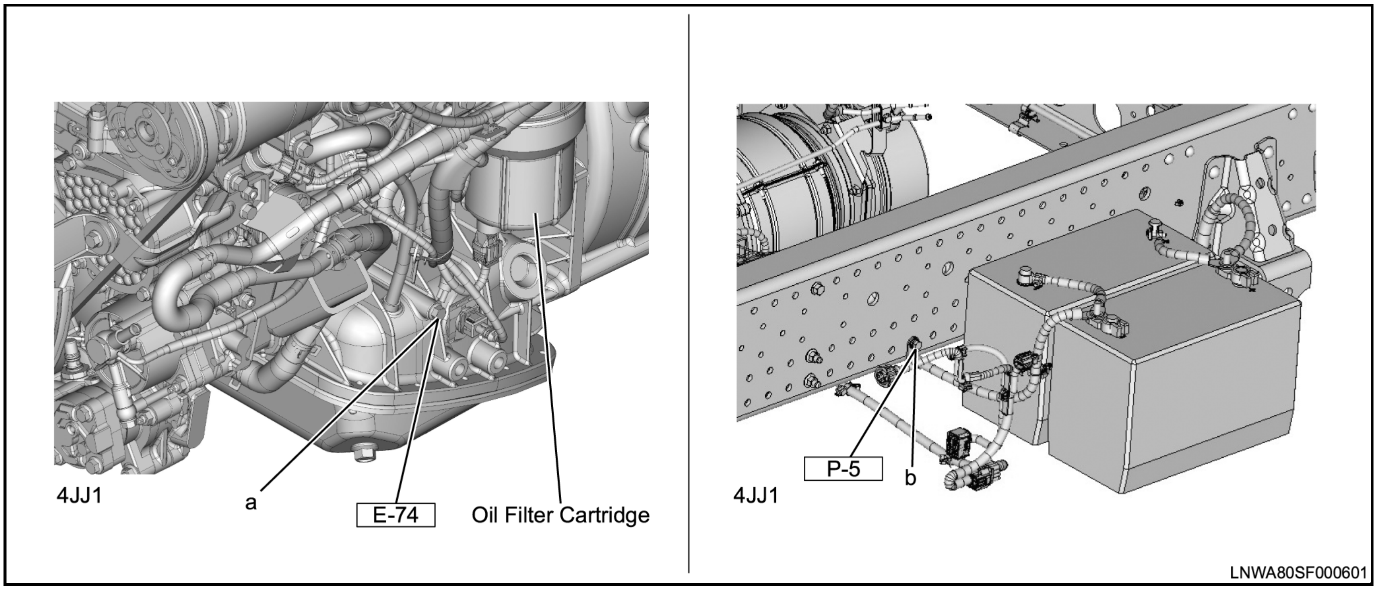
(a) 26 N•m (20 lb·ft)


J-109
J-110
a
Frame-LH (Rear)
a
Frame-LH (Center)
J-8
J-9
J-12
LNWD80SF000901

4496038

Legend

(a) 26 N•m (20 lb·ft)


4JJ1
a
E-74
Oil Filter Cartridge
4JJ1
P-5
b
LNWA80SF000601

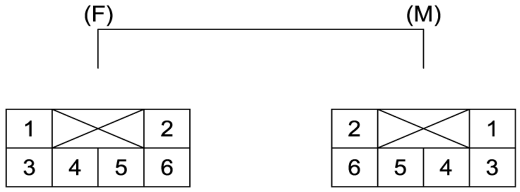
4496041

Legend

(a)	16 N•m (12 lb·ft)	(b)	26 N•m (20 lb·ft)

Visual Identification

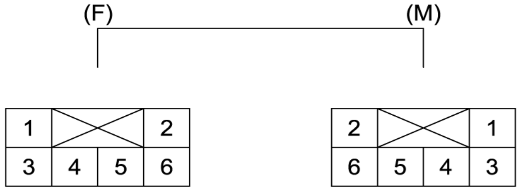
Inline Harness Connector End Views



LNW78DSH000201
4497101

Connector No.	H-31			
Connector Color	White			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	GRY	J/C 10P BASE3 B-507(7)	BLK	Side Turn Light(LH)
2	GRN/BLK	Sub Junction Block 1 B-132(14)	GRN/BLK	Side Turn Light(LH)
3	GRN/RED	Sub Junction Block 1 B-132(1)	GRN/RED	Side Marker Light(LH)
4	ORN	Audio	ORN	Speaker(LH)
5	GRN	Combination Switch	GRN/BLK	Front Cornering Light(LH)
6	BLK	Audio	BLK	Speaker(LH)

H-32

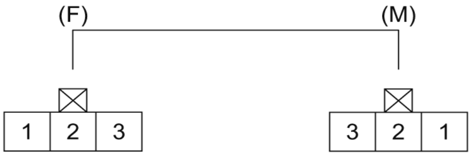


LNW78DSH000201

4497104

Connector No.	**H-32**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-4A**		**(F) J-35616-5**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	GRY	J/C 10P BASE2 B-506(7)	BLK	Side Turn Light(RH)
2	GRN/WHT	Sub Junction Block 1 B-132(11)	GRN/WHT	Side Turn Light(RH)
3	GRN/RED	Sub Junction Block 1 B-131(6)	GRN/RED	Side Marker Light(RH)
4	GRY	Audio	GRY	Speaker(RH)
5	GRN/WHT	Combination Switch	GRN/WHT	Front Cornering Light(RH)
6	GRN	Audio	GRN	Speaker(RH)

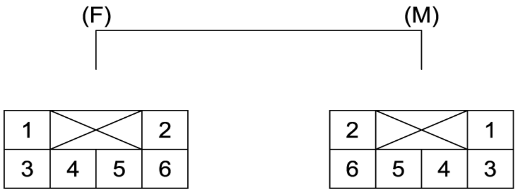
H-33



LNWF80SH000401

4497106

Connector No.	**H-33**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-44**		**(F) J-35616-45**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	VIO	Cab Junction Block1 B-20(7)	GRY	Door Switch RH
2	—	Not Used	—	Not Used
3	—	Not Used	—	Not Used


(F)
(M)
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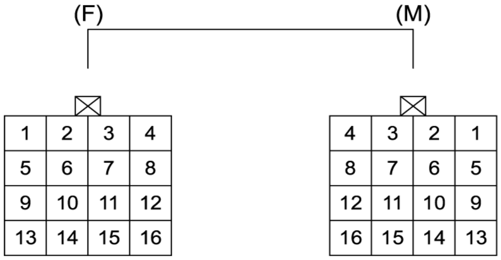
LNW78DSH000201
4497109

Connector No.	H-45			
Connector Color	White			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	—	Not Used	—	Not Used
2	BRN	J/C 10P BASE1 B-505(6)	RED	Dome Light
3	GRY	Cab Junction Block1 B-22(6)	GRY/BLU	Dome Light
4	GRN/RED	Cab Junction Block1 B-22(9)	GRN/RED	Joint Connector7
5	GRY	Cab Junction Block1 B-22(9)	—	Not Used
6	GRY	J/C 10P BASE2 B-506(8)	BLK	Joint Connector5


(F)
(M)
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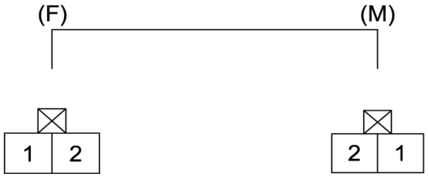
LNW78DSH000401
4497114

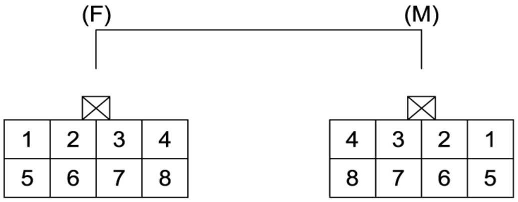
Connector No.	**H-52**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-12**		**(F) J-35616-13**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	BLU/YEL	H-81 (23)	BLU/YEL	Engine Oil Pressure Switch
2	GRN/WHT	H-80 (7)	GRN/WHT	Oil Level Switch
3	BRN/YEL	Triple Pressure Switch ECM	BRN/YEL	A/C Compressor
4	BLK/WHT	Starter Relay	WHT/BLK	ECM
5	BLU/WHT	ECM	BLU/WHT	Glow Plug Control Module
6	BLU	ECM	BLU	Glow Plug Control Module
7	BLU/WHT	H-90(8)	BLU/WHT	Glow Plug Control Module
8	BLU	H-90(7)	BLU	Glow Plug Control Module
9	GRY/RED	H-101(20)	GRY/RED	ECM
10	RED/BLU	H-101(21)	RED/BLU	ECM
11	BLU/WHT	H-80(19)	BLU/WHT	ECM
12	BLK/YEL	PM Sensor Relay	BLK/YEL	ECM
13	BLU/ORN	PM Sensor Relay Vehicle Speed Sensor	BLU/ORN	ECM Turbocharger Nozzle Control Solenoid Valve
14	BRN/WHT	H-81(16)	BLU/BLK	Fuel Sedimenter Switch
15	BLK/BLU	Fuse: PM Sensor	RED	Glow Plug Control Module 2
16	WHT/BLU	H-80(12) Fuel Heater Relay	WHT/BLU	Generator



LNW78DSH000501
4497116

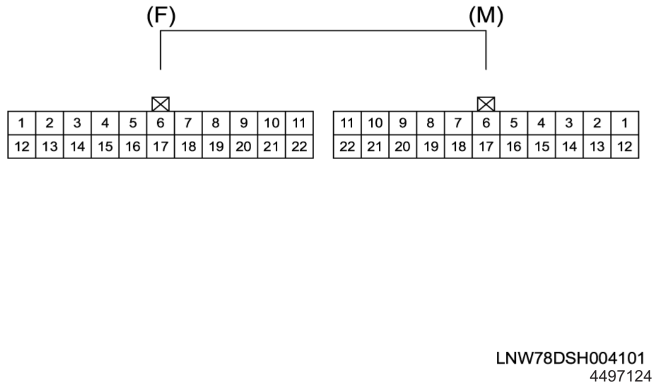
Connector No.	**H-53**			
Connector Color	**Gray**			
Test Adapter No.	**(M) J-35616-21**		**(F) J-35616-22**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	BLU/BLK	SBF GLOW (60A)	BLU/BLK	Glow Plug Control Module

Connector No.	H-53			
Connector Color	Gray			
Test Adapter No.	(M) J-35616-21		(F) J-35616-22	
	Male		Female	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
2	BLK/WHT	Starter	BLK/WHT	Starter Relay

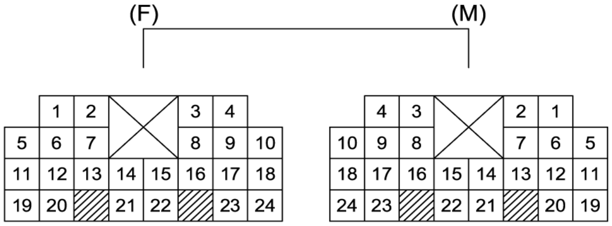


LNW78DSH000601
4497120

Connector No.	H-66			
Connector Color	Black			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	GRN/BLK	Rear Combination Light (LH)	GRN/BLK	H-101 (1)
2	GRN	Rear Combination Light (RH) Rear Combination Light (LH)	GRN	H-101 (3)
3	—	Not Used	—	Not Used
4	—	Not Used	—	Not Used
5	GRN/RED	License Plate Light Rear Combination Light (LH) Rear Combination Light (RH)	GRN/RED	H-101 (5)
6	RED/BLU	Rear Combination Light (LH) Rear Combination Light (RH)	RED/BLU	H-101 (28) Back Buzzer
7	BLK	Rear Combination Light (RH) Rear Combination Light (LH) License Plate Light	BLK	W/S-6
8	GRN/WHT	Rear Combination Light (RH)	GRN/WHT	H-101 (2)


(F)
(M)
1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21 22
11 10 9 8 7 6 5 4 3 2 1
22 21 20 19 18 17 16 15 14 13 12
LNW78DSH004101
4497124

Connector No.	**H-80**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-18**		**(F) J-35616-19**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	VIO	Sub Junction Block 1 B-135(7)	BLK/ORN	ECM
2	GRY	Sub Junction Block 1 B-131(7)	BLK	Vehicle Speed Sensor
3	LT GRN	Combination Switch	PNK/BLU	Diode2/ECM
4	—	Not Used	—	Not Used
5	—	Not Used	—	Not Used
6	—	Not Used	—	Not Used
7	BLU	IP Cluster	GRN/WHT	H-52 (2)
8	VIO	IP Cluster	ORN/BLU	ECM
9	LT BLU	Cruise Main Switch	GRY/BLU	ECM
10	YEL	Wiper Exhaust Brake Switch	LT GRN/RED	ECM
11	BLU	IP Cluster	YEL/BLK	ECM
12	LT BLU	Sub Junction Block 1 B-131(10)	WHT/BLU	H-52(16)
13	—	Not Used	—	Not Used
14	—	Not Used	—	Not Used
15	BRN	Combination Switch	GRY	Diode1/ECM
16	GRN	IP Cluster	BLK/ORN	Air Cleaner Switch
17	YEL	Cab Junction Block1 B-21(7)	BLK/RED	Inhibitor Switch (10)
18	—	Not Used	—	Not Used
19	BRN	DPF Regeneration Switch	BLU/WHT	H-52(11)
20	YEL	J/C 10P BASE1 B-505(3)	YEL	Rear Dome Light Relay
21	—	Not Used	—	Not Used
22	LT GRN	Stoplight Switch	RED/WHT	ECM

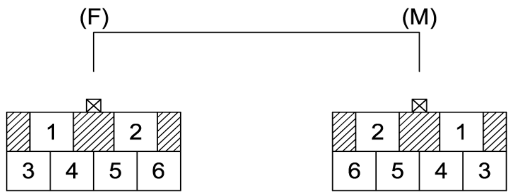


LNW78DSH004201
4497126

Connector No.	H-81			
Connector Color	Green			
Test Adapter No.	(M) J-35616-12/ J-35616-40		(F) J-35616-13/ J-35616-41	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
1	LT BLU	Cab Junction Block1 B-18(9)	RED/BLK	Horn (RH) Horn (LH)
2	—	Not Used	—	Not Used
3	VIO	Sub Junction Block 1 B-135(8)	GRN/WHT	H-101 (2)/H-172 (4)
4	LT GRN	Cab Junction Block 1 B-22(15)	BLK/WHT	Starter Relay
5	VIO	Sub Junction Block 1 B-136 (5)	GRN/BLK	H-101 (1)
6	RED/BLU	H-84 (12)	RED/BLU	Linear Solenoid 2
7	RED/YEL	H-84 (7)	RED/YEL	Linear Solenoid 2
8	RED/WHT	H-84 (10)	RED/WHT	Linear Solenoid 4
9	RED/BLK	H-84 (3)	RED/BLK	Linear Solenoid 4
10	BRN	IP Cluster	LT GRN/WHT	H-101 (6)
11	—	Not Used	—	Not Used
12	RED	H-84 (11)	RED	Linear Solenoid 3
13	RED/GRN	H-84 (6)	RED/GRN	Linear Solenoid 3
14	WHT/RED	W/S-25	WHT/RED	SBF Headlight(30A)
15	BLK/RED	Cab Junction Block 1 B-25 (1)	BLK/RED	SBF Starter Switch 1 (30A)
16	BEI	IP Cluster	BRN/WHT	H-52 (14)
17	LT BLU	Sub Junction Block 1 B-136 (12)	GRN	H-101 (3)/H—172 (1) ECM EHCU
18	—	Not Used	—	Not Used
19	—	Not Used	—	Not Used
20	YEL	Sub Junction Block 1 B-135 (10)	RED/BLK	H-101 (31) Inhibitor Switch
21	BLK/YEL	W/S-10	BLK/YEL	SBF Junction Block (50A)
22	WHT/BLK	Cab Junction Block 1 B-26 (2)	WHT/BLK	SBF Wiper (50A)
23	LT GRN	IP Cluster	BLU/YEL	H-52 (1)

Connector No.	H-81			
Connector Color	Green			
Test Adapter No.	(M) J-35616-12/ J-35616-40		(F) J-35616-13/ J-35616-41	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
24	—	Not Used	—	Not Used

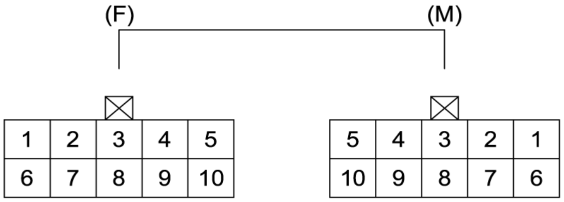
H-82



LNW78DSH004301

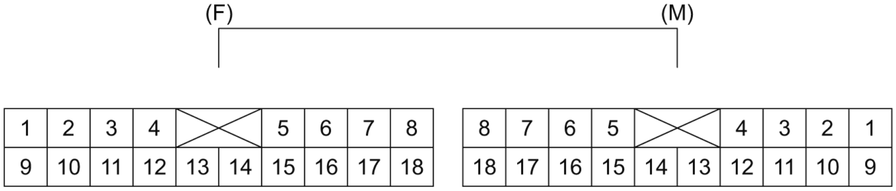
4497161

Connector No.	H-82			
Connector Color	Gray			
Test Adapter No.	(M) J-35616-12/ J-35616-44		(F) J-35616-13/ J-35616-45	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
1	WHT/BLK	Blower Relay	WHT/BLK	SBF HVAC(40A)
2	RED/BLK	Power ACC Relay	RED/BLK	SBF POWER ACC(50A)
3	—	Not Used	—	Not Used
4	BRN	Sub Junction Block 1 B-132(2)	GRN/RED	Marker Light Relay
5	BLK/YEL	W/S-8	BLK/YEL	SBF Starter Switch 2 (40A)
6	BLK/YEL	W/S-8	BLK/YEL	SBF Starter Switch 2 (40A)


(F)
(M)
1 2 3 4 5
6 7 8 9 10
5 4 3 2 1
10 9 8 7 6

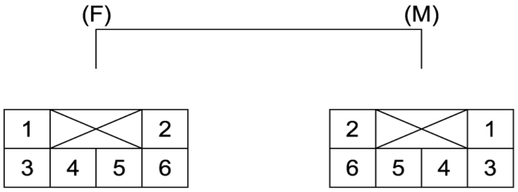
LNW78DSH000701
4497182

Connector No.	**H-83**			
Connector Color	**White**			
Test Adapter No.	**(M) J-35616-18**		**(F) J-35616-19**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	GRY	J/C-101	BLK	ECM
2	WHT	Accelerator Pedal Position Sensor	WHT	ECM
3	—	Not Used	—	Not Used
4	BLU/WHT	Accelerator Pedal Position Sensor	BLU/WHT	ECM
5	BLU	Accelerator Pedal Position Sensor	BLU	ECM
6	GRY	J/C-101	—	Shield
7	RED	Accelerator Pedal Position Sensor	RED	ECM
8	—	Not Used	—	Not Used
9	BLU	J/C-100	BLU/RED	ECM
10	BLU	J/C-100	—	Shield


(F)
(M)
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16 17 18
8 7 6 5 4 3 2 1
18 17 16 15 14 13 12 11 10 9

LNWF80SF000301
4497185

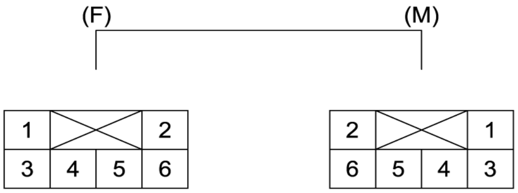
Connector No.	H-84			
Connector Color	White			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
1	BLU	IP Cluster	BLU	CAN1 JOINT Mimamori L
2	YEL/BLK	IP Cluster	YEL/BLK	TCM
3	RED/BLK	H-81 (9)	RED/BLK	TCM
4	WHT/BLK	H-85 (4)	WHT/BLK	DRL Control Unit
5	RED/BLU	DRL Relay B-21 (5)	RED/BLU	DRL Control Unit
6	RED/GRN	H-81 (13)	RED/GRN	TCM
7	RED/YEL	H-81 (7)	RED/YEL	TCM
8	VIO	IP Cluster	VIO	TCM
9	BLU/WHT	IP Cluster	BLU/WHT	CAN1 JOINT Mimamori H
10	RED/WHT	H-81 (8)	RED/WHT	TCM
11	RED	H-81 (12)	RED	TCM
12	RED/BLU	H-81 (6)	RED/BLU	TCM
13	BLU/WHT	Sub Junction Block 1 B-132 (16)	BLU/WHT	Diode Door Lock
14	PNK/BLU	Key Remained Switch	PNK/BLU	Keyless Entry Control Unit
15	YEL/GRN	IP Cluster	YEL/GRN	DRL Control Unit
16	RED	IP Cluster	RED	Cab Junction Block 1 B-19 (8)
17	LT GRN	Cornering Light Relay	LT GRN	Cab Junction Block1 B-20 (3)
18	WHT/BLU	IP Cluster	WHT/BLU	TCM



LNW78DSH000201
4497189

Connector No.	H-85 (Crew Cab Only)			
Connector Color	Black			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
1	—	Not Used	—	Not Used
2	GRY	Door Switch (LH)	GRY	Cab Junction Block1 B-17 (2)
3	—	Not Used	—	Not Used

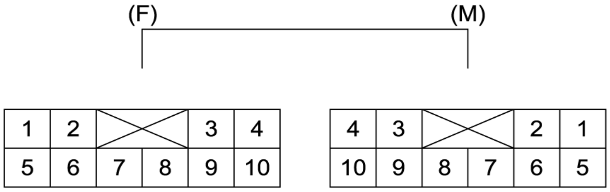
Connector No.	H-85 (Crew Cab Only)			
Connector Color	Black			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
4	WHT/BLK	Parking Brake Switch	WHT/BLK	H-84 (4)
5	—	Not Used	—	Not Used
6	—	Not Used	RED/YEL	W/S-19



LNW78DSH000201
4497189

Connector No.	H-85 (Tilt Cab Only)			
Connector Color	Black			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
1	WHT/GRN	Seat Belt Switch	WHT/GRN	(IP) Cluster
2	GRY	Door Switch (LH)	GRY	Cab Junction Block1 B-17 (2)
3	—	Not Used	—	Not Used
4	WHT/BLK	Parking Brake Switch	WHT/BLK	H-84 (4)
5	VIO	Shift Lever	VIO	Key Lock Solenoid
6	—	Not Used	RED/YEL	Not Used

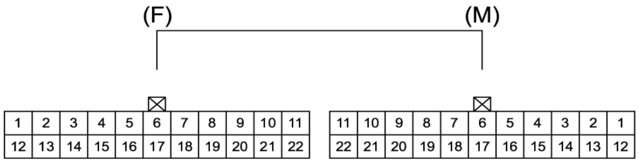
H-87



LNW78DSH000901

4497194

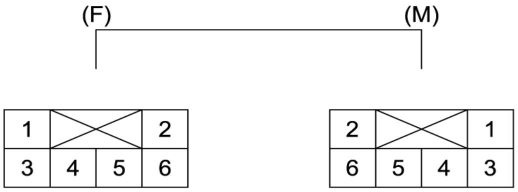
Connector No.	H-87			
Connector Color	Green			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	BLK	Earth Joint 10P1	BLK	Mirror Heater (RH)
2	VIO	J/C 10P BASE ADD1 B-508(3)	GRN/RED	Front Door Lock Motor (RH)
3	BLK/RED	Sub Junction Block 1 B-133(14)	BLK/RED	Front Cornering Light (RH)
4	BLU/WHT	H-92(16)	BLU/WHT	Front Power Window Switch (RH)
5	GRY	W/S-13	BLK	Side Marker Light(RH)
6	BRN/YEL	Cab Junction Block 1 B-15(5)	BRN/YEL	Front Power Window Switch (RH)
7	LT BLU	J/C 10P BASE ADD1 B-508(8)	GRN/YEL	Front Door Lock Motor (RH)
8	BLU/RED	H-92(4)	BLU/RED	Front Power Window Switch (RH)
9	RED/YEL	Mirror Heater Switch	RED/YEL	Mirror Heater (RH)
10	—	Not Used	—	Not Used



LNW78DSH004101
4497198

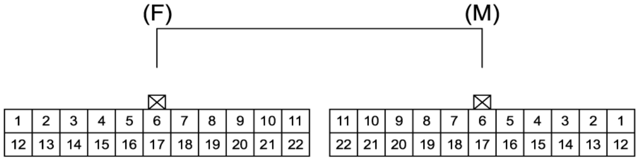
Connector No.	H-88			
Connector Color	Blue			
Test Adapter No.	(M) J-35616-16		(F) J-35616-17	
	Male		Female	
Pin No.	Wire Color	Pin Function	Wire Color	Pin Function
1	BRN	TCM	BLK/GRN	H-177 (1)
2	LT BLU	TCM	BLK/YEL	Transmission Fluid Temperature (TFT) Sensor Valve Body (J-119)
3	YEL	TCM	WHT	Transmission Fluid Temperature (TFT) Sensor Valve Body (J-119)
4	BLU	TCM	WHT/RED	Inhibitor Switch (J-122)
5	VIO	TCM	RED/BLU	Inhibitor Switch (J-122)
6	—	Not Used	—	Not Used
7	LT BLU	TCM	BLU/YEL	Inhibitor Switch (J-122)
8	LT GRN	TCM	BLU/RED	Inhibitor Switch (J-122)
9	BRN	TCM	BLU/WHT	Inhibitor Switch (J-122)
10	BRN	TCM	YEL/RED	Linear Solenoid1 (SL1) (J-119)
11	YEL	TCM	YEL/BLK	Linear Solenoid1 (SL1) (J-119)
12	—	Not Used	—	Not Used
13	VIO	TCM	ORN	Transmission Fluid Pressure (TFP) Switch (J-120)
14	BRN	TCM	RED/YEL	ECM
15	VIO	TCM	GRY	Transmission Fluid Pressure (TFP) Switch (J-120)
16	LT GRN	TCM	VIO	Transmission Fluid Pressure (TFP) Switch (J-120)
17	BLU	TCM	WHT	Transmission Fluid Pressure (TFP) Switch (J-119)
18	LT BLU	TCM	YEL	Transmission Fluid Pressure (TFP) Switch (J-119)
19	BLU	TCM	RED	Transmission Fluid Pressure (TFP) Switch (J-120)
20	BRN	TCM	BLU/BLK	Transmission Fluid Pressure (TFP) Switch (J-119)

Connector No.	**H-88**			
Connector Color	**Blue**			
Test Adapter No.	**(M) J-35616-16**		**(F) J-35616-17**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
21	YEL	TCM	WHT/BLU	Transmission Fluid Pressure (TFP) Switch (J-119)
22	BLU	TCM	BLU	Inhibitor Switch (J-122)



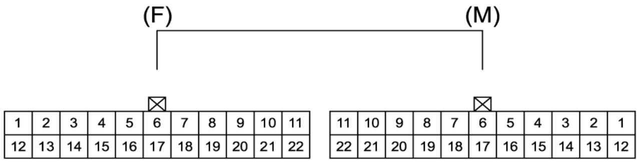
LNW78DSH000201
4497201

Connector No.	**H-89**			
Connector Color	**Orange**			
Test Adapter No.	**(M) J-35616-4A**		**(F) J-35616-5**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	BLU	TCM	WHT/GRN	Shift Solenoid
2	VIO	TCM	YEL/BRN	Shift Solenoid
3	LT BLU	TCM	YEL	Shift Solenoid
4	LT GRN	TCM	RED/YEL	Shift Solenoid
5	BLU	Sub Junction Block1 B-133 (1)	GRN/BLK	Fuse Tail Main (20A)
6	LT BLU	Sub Junction Block1 B-138 (18)	GRN/BLK	Fuse Tail Main (20A)



LNW78DSH004101
4497204

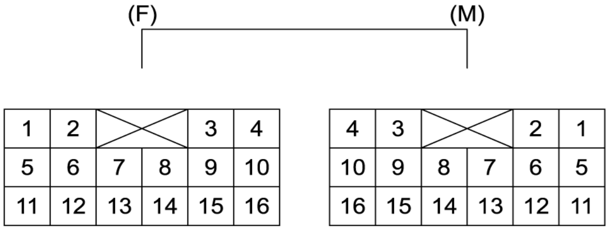
Connector No.	**H-90**			
Connector Color	**White**			
Test Adapter No.	**(M) J-35616-18**		**(F) J-35616-19**	
	Male		**Female**	
Pin No.	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	—	Not Used	—	Not Used
2	—	Not Used	—	Not Used
3	—	Not Used	—	Not Used
4	—	Not Used	—	Not Used
5	—	Not Used	—	Not Used
6	—	Not Used	—	Not Used
7	BLU	CAN1 JOINT FMS-L	BLU	H-52 (8)
8	BLU/WHT	CAN1 JOINT FMS-H	BLU/WHT	H-52 (7)
9	—	Not Used	—	Not Used
10	—	Not Used	—	Not Used
11	BRN	Electronic Thermostat	GRY	Magnetic Clutch Relay
12	—	Not Used	—	Not Used
13	BRN	J/C 10P ADD4 B-520 (7)	PNK	H101 (30)
14	—	Not Used	—	Not Used
15	—	Not Used	—	Not Used
16	—	Not Used	—	Not Used
17	VIO	Rear Body Switch	GRY/PNK	Front Manufacture Connector
18	—	Not Used	—	Not Used
19	—	Not Used	—	Not Used
20	BLU	PTO Engine Speed Control Switch	BLU/ORN	H-101 (4) Diode 2
21	YEL	PTO Engine Speed Control Switch	BLU/YEL	H-101 (7) Diode 1
22	VIO	J/C 10P ADD3 B-519(4)	BLK/RED	Magnetic Clutch Relay



LNW78DSH004101
4497206

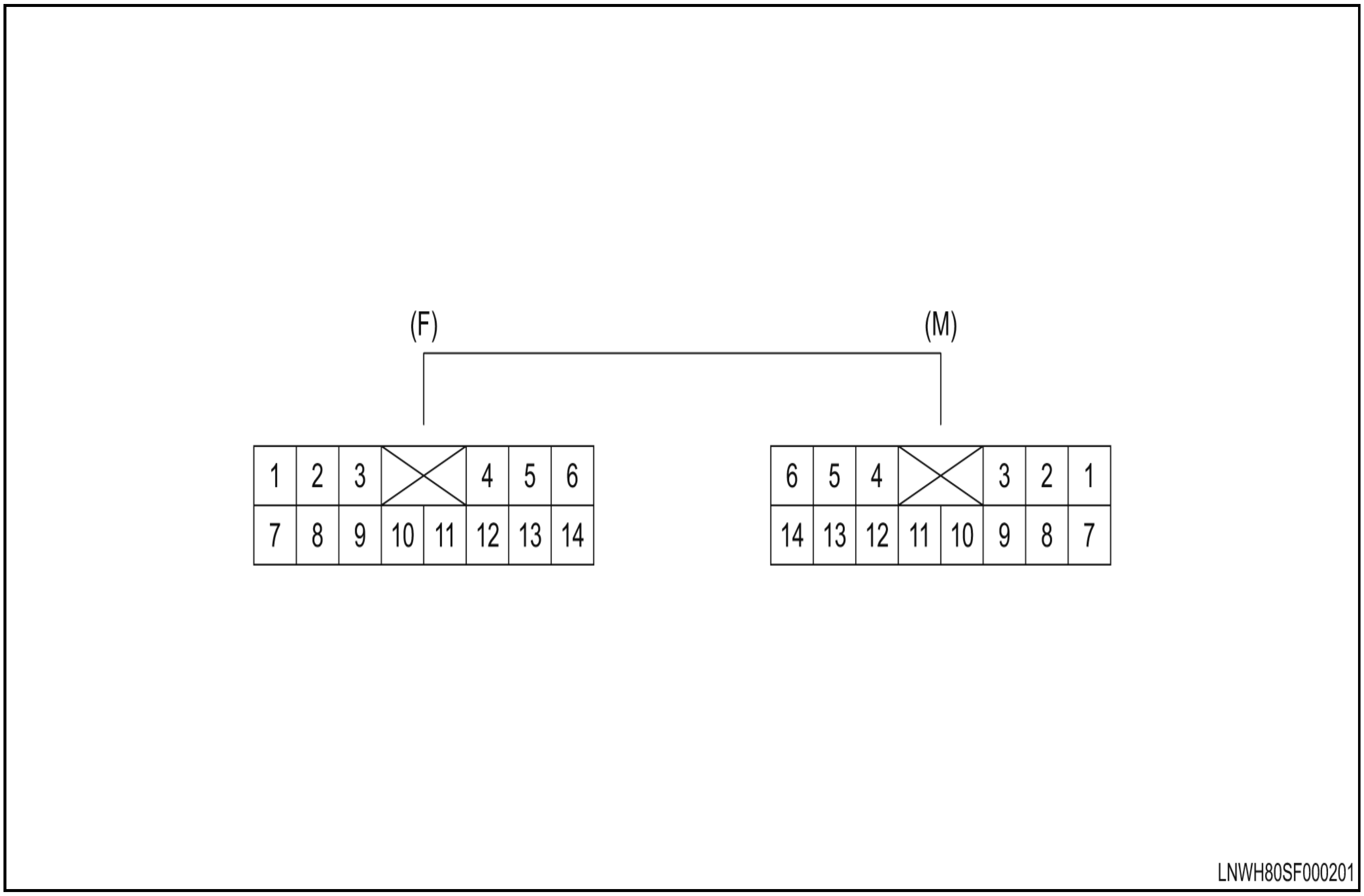
Connector No.	H-91			
Connector Color	Gray			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	WHT	Sub Junction Block 1 B-137 (4)	BLK/YEL	EHCU
2	GRN/WHT	CAN2 JOINT Check-H	GRN/WHT	H-176 (13)/ECM Diesel Exhaust Fluid (DEF) Control Module
3	—	Not Used	—	Not Used
4	BRN	TCM	BLK/RED	H-177 (4)
5	YEL	TCM	WHT/BLK	Output Shaft Speed Sensor
6	—	Not Used	—	Not Used
7	LT BLU	Sub Junction Block 1 B-138(5)	BLK/WHT	H-91(9)
8	—	Not Used	—	Not Used
9	BLK/BLU	DRL Control Unit	BLK/WHT	H-91(7)
10	—	Not Used	—	Not Used
11	—	Not Used	—	Not Used
12	WHT	Sub Junction Block 1 B-133(16)	LT GRN/BLU	EHCU
13	GRN	CAN2 JOINT Check-L	GRN	H-176 (14) ECM Diesel Exhaust Fluid (DEF) Control Module
14	—	Not Used	—	Not Used
15	LT BLU	J/C-50	WHT/RED	H-177 (3)
16	LT BLU	J/C-50	WHT/RED	Output Shaft Speed Sensor
17	—	Not Used	—	Not Used
18	—	Not Used	—	Not Used
19	YEL	TCM	BLU/BLK	ECM
20	—	Not Used	—	Not Used
21	LT BLU	Cab Junction Block 1 B-20 (4)	BLK/ORN	EHCU Diesel Exhaust Fluid (DEF) Control Module

Connector No.	H-91			
Connector Color	Gray			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
22	—	Not Used	—	Not Used



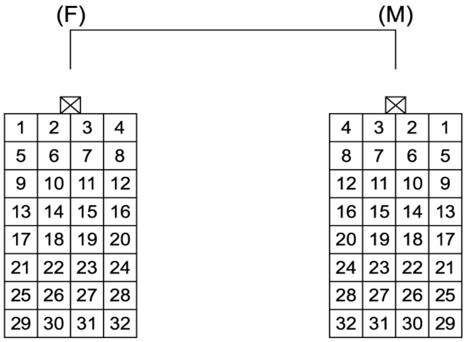
LNW78DSH001001
4497208

Connector No.	H-92			
Connector Color	Black			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	LT BLU	Sub Junction Block 1 B-134(14)	GRN/BLK	Front Door Lock Motor (LH)
2	LT GRN	Sub Junction Block 1 B-134(17)	BLK/RED	Front Cornering Light (LH)
3	VIO	Keyless Entry Control Unit	RED/GRN	Front Door Lock Motor (LH)
4	BLU/RED	H-87(8)	BLU/RED	Front Power Window Switch (LH)
5	VIO	J/C 10P ADD1 B-508(2)	GRN/RED	Front Door Lock Motor (LH)
6	—	Not Used	—	Not Used
7	BRN/YEL	Cab Junction Block 1 B-23(2)	BRN/YEL	Front Power Window Switch (LH)
8	LT GRN	J/C 10P ADD3 B-519(10)	RED/YEL	Mirror Heater (LH)
9	GRY	Earth Joint 10P2	BLK	Mirror Heater (LH)
10	GRY	W/S-11	BLK	Front Door Lock Motor (LH)
11	BLK	Earth Joint 10P2	BLK	Front Power Window Switch (LH)
12	—	Not Used	—	Not Used
13	LT BLU	J/C 10P ADD1 B-508(7)	GRN/YEL	Front Door Lock Motor (LH)
14	—	Not Used	—	Not Used
15	GRY	W/S-16	BLK	Side Marker Light (LH)
16	BLU/WHT	H-87(4)	BLU/WHT	Front Power Window Switch (LH)



4646181

Connector No.	**H-93**			
Connector Color	**White**			
Test Adapter No.	**(M) J-35616-4A**		**(F) J-35616-5**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	LT GRN/RED	Overdrive Switch	LT GRN/RED	Sub Junction Block 1 B-138(9)
2	WHT/BLU	Overdrive Switch	WHT/BLU	TCM
3	LT GRN/BLK	Overdrive Switch	LT GRN/BLK	Sub Junction Block 1 B-134(15)
4	BLK	J/C 1	GRY	W/S-11
5	—	Not Used	—	Not Used
6	—	Not Used	—	Not Used
7	—	Not Used	—	Not Used
8	—	Not Used	—	Not Used
9	—	Not Used	—	Not Used
10	—	Not Used	—	Not Used
11	LT GRN	Shift Lever	LT GRN	W/S-22
12	GRN/YEL	Shift Lever	GRN/YEL	Sub Junction Block 1 B-138 (11)
13	GRN	Shift Lever	GRN	J/C 10P ADD 4 B-520 (3)
14	—	Not Used	—	Not Used

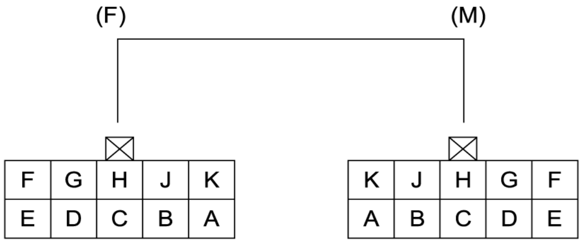

(F)
(M)
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
21 22 23 24
25 26 27 28
29 30 31 32
4 3 2 1
8 7 6 5
12 11 10 9
16 15 14 13
20 19 18 17
24 23 22 21
28 27 26 25
32 31 30 29

LNW78DSH001201
4497211

Connector No.	H-101			
Connector Color	Gray/Black			
Test Adapter No.	(M) J-35616-2A/ J-35616-64B		(F) J-35616-3/ J-35616-65B	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	GRN/BLK	H-66 (1)	GRN/BLK	H-81 (5)
2	GRN/WHT	H-66 (8)	GRN/WHT	H-81 3)
3	GRN	H-66 (2)	GRN	H-81 (17)
				ECM
				EHCU
4	BLU/ORN	H-105 (H)	BLU/ORN	Diode2
				H-90 (20)
5	GRN/RED	H-66 (5)	GRN/RED	Marker Light Relay
6	LT GRN/WHT	Fuel Tank Unit (In)	LT GRN/WHT	H-81 (10)/H-173 (9)
7	BLU/YEL	H-105 (D)	BLU/YEL	Diode3
				H-90 (21)
8	PNK/GRN	H-105 (B)	PNK/GRN	ECM
9	BLK/WHT	H-105 (A)	BLK/WHT	ECM
10	YEL	H-105 (F)	YEL	ECM
11	PNK/BLK	H104 (F)	PNK/BLK	ECM
12	RED/GRN	H104 (B)	RED/YEL	ECM
13	WHT/BLU	H-241 (2)	WHT/BLU	EHCU
14	ORN/BLU	H-241 (1)	ORN/BLU	EHCU
15	WHT	H-241 (2)	WHT	EHCU
16	VIO	H-241 (1)	VIO	EHCU
17	RED/YEL	H-104 (J)	RED/GRN	ECM
18	RED/BLK	H-104 (K)	RED/BLK	ECM
19	BRN	H-104 (E)	BRN/ORN	ECM
20	GRY/RED	H-104 (D)	GRY/RED	H-52 (9)
21	RED/BLU	H-104 (C)	RED/BLU	H-52 (10)
22	—	Not Used	—	Not Used

Connector No.	**H-101**			
Connector Color	**Gray/Black**			
Test Adapter No.	**(M) J-35616-2A/ J-35616-64B**		**(F) J-35616-3/ J-35616-65B**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
23	BLU	H-105 (E)	BLU	ECM
24	BLU/RED	H-105(G)	BLU/RED	ECM
25	BLK	Body Earth 20 J-110	BLK	W/S-4
26	BLK	W/S-6	BLK	W/S-4
27	RED	Rear Manufacture Connector	RED	Fuse RR Dome Light (15A)
28	RED/BLU	H-66 (6)	RED/BLU	H-88 (5) Inhibitor Switch
29	LT GRN/BLK	Rear Manufacture Connector	LT GRN/BLK	Marker Light Relay
30	PNK	H-105 (C)	PNK	H-90 (13)
31	RED/BLK	H-104 (A)	RED/BLK	H-81 (20)
32	—	Not Used	—	Not Used

H-104



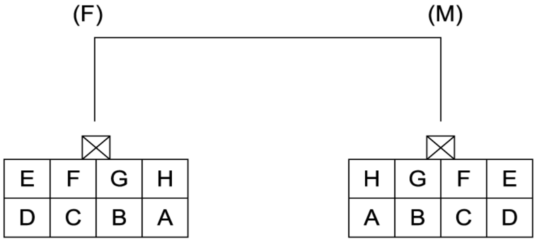
LNW78DSH004601

4497214

Connector No.	**H-104**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-12**		**(F) J-35616-13**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
A	—	—	RED/ BLK	H-101(31)
B	—	—	RED/GRN	H-101(12)
C	—	—	RED/BLU	H-101(21)
D	—	—	GRY/RED	H-101(20)
E	—	—	BRN	H-101(19)
F	—	—	PNK/BLK	H-101(11)
G	—	—	—	Not Used

Connector No.	H-104			
Connector Color	Black			
Test Adapter No.	(M) J-35616-12		(F) J-35616-13	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
H	—	—	BLK	W/S-6
J	—	—	RED/YEL	H-101(17)
K	—	—	RED/BLK	H-101(18)

H-105

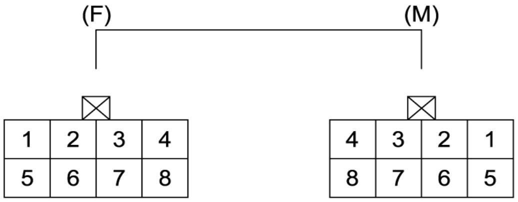


LNW78DSH004701

4497215

Connector No.	H-105			
Connector Color	Black			
Test Adapter No.	(M) J-35616-12		(F) J-35616-13	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
A	—	—	BLK/WHT	H-101(9)
B	—	—	PNK/GRN	H-101(8)
C	—	—	PNK	H-101(30)
D	—	—	BLU/YEL	H-101(7)
E	—	—	BLU	H-101(23)
F	—	—	YEL	H-101(10)
G	—	—	BLU/RED	H-101(24)
H	—	—	BLU/ORN	H-101(4)

H-168

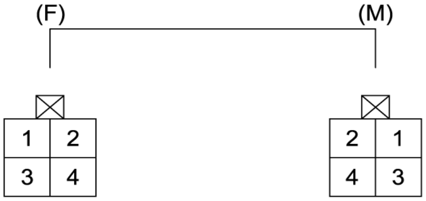


LNW78DSH000601

4497217

Connector No.	H-168			
Connector Color	Black			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	RED/BLK	Boost Pressure Sensor	RED/BLK	ECM
2	BLU	Boost Pressure Sensor	BLU	ECM
3	GRN	Boost Pressure Sensor	GRN	ECM
4	YEL	Boost Pressure Sensor	YEL	ECM
5	BLK	Shield Line	BLK	Shield Line
6	ORN	Fuel Rail Pressure (FRP) Sensor	ORN	ECM
7	ORN/BLU	Fuel Rail Pressure (FRP) Sensor	ORN/BLU	ECM
8	BLU/GRN	Fuel Rail Pressure (FRP) Sensor	BLU/GRN	ECM

H-169

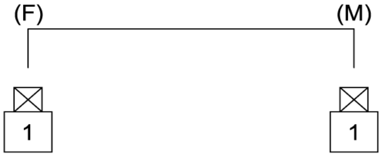


LNW78DSH001101

4497219

Connector No.	H-169			
Connector Color	Light Gray			
Test Adapter No.	(M) J-35616-40		(F) J-35616-41	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	RED	Glow Plug Control Module	RED	Glow Plug Cylinder No.1
2	GRN	Glow Plug Control Module	GRN	Glow Plug Cylinder No.2
3	PNK	Glow Plug Control Module	PNK	Glow Plug Cylinder No.3
4	BLU	Glow Plug Control Module	BLU	Glow Plug Cylinder No.4

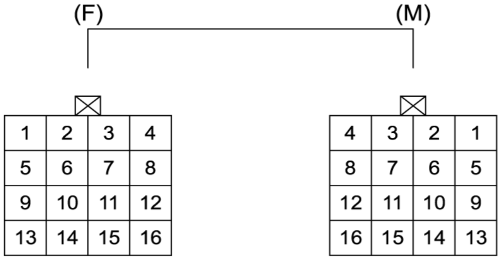
H-170



LNWA8DSH000601

4497220

Connector No.	**H-170**			
Connector Color	**Gray**			
Test Adapter No.	**(M) J-35616-44**		**(F) J-35616-45**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	RED/ GRN	Relay Box FL-14 ETB	RED/ GRN	Up Filter Install (ETB)

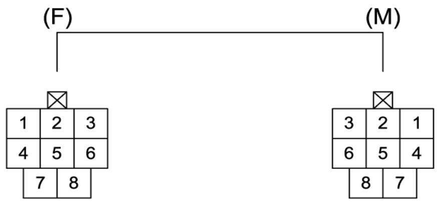


LNW78DSH000401
4497222

Connector No.	**H-171**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-18**		**(F) J-35616-19**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	RED/BLU	Diesel Exhaust Fluid (DEF) Control Module	RED/BLU	Diesel Exhaust Fluid (DEF) Pump
2	WHT/BLK	Diesel Exhaust Fluid (DEF) Control Module	WHT/BLK	Diesel Exhaust Fluid (DEF) Pump
3	GRY	Diesel Exhaust Fluid (DEF) Control Module	GRY	Diesel Exhaust Fluid (DEF) Pump
4	RED	Diesel Exhaust Fluid (DEF) Control Module	RED	Diesel Exhaust Fluid (DEF) Pump
5	LT GRN	Diesel Exhaust Fluid (DEF) Control Module	LT GRN	Diesel Exhaust Fluid (DEF) Pump
6	WHT/BLU	Diesel Exhaust Fluid (DEF) Control Module	WHT/BLU	Diesel Exhaust Fluid (DEF) Pump
7	VIO/YEL	Diesel Exhaust Fluid (DEF) Control Module	VIO/YEL	Diesel Exhaust Fluid (DEF) Pump
8	PNK	Diesel Exhaust Fluid (DEF) Control Module	PNK	Diesel Exhaust Fluid (DEF) Pump
9	BLU/WHT	Diesel Exhaust Fluid (DEF) Control Module	BLU/WHT	Diesel Exhaust Fluid (DEF) Tank Level and Temperature Sensor
10	BLU/WHT	NOx Sensor 2	BLU/WHT	Diesel Exhaust Fluid (DEF) Tank Level and Temperature Sensor
11	BLU/ORN	NOx & Diesel Exhaust Fluid (DEF) Sensor Relay H-173 (4) H-176 (3)	BLU/WHT	Diesel Exhaust Fluid (DEF) Tank Level and Temperature Sensor

Connector No.	H-171			
Connector Color	Black			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
12	BLK	Earth Body SCR 2	PNK/WHT	Diesel Exhaust Fluid (DEF) Tank Level and Temperature Sensor
13	BLU	NOx Sensor 2	BLU	Diesel Exhaust Fluid (DEF) Tank Level and Temperature Sensor
14	BLU	Diesel Exhaust Fluid (DEF) Control Module	BLU	Diesel Exhaust Fluid (DEF) Tank Level and Temperature Sensor
15	RED/WHT	Heater Valve Relay	RED/WHT	Diesel Exhaust Fluid (DEF) Tank Heater Coolant Control Valve
16	BLK	Earth Body SCR 2	BLK	Diesel Exhaust Fluid (DEF) Tank Heater Coolant Control Valve

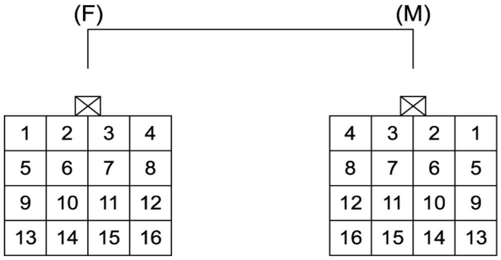
H-172



LNWA8DSH000501

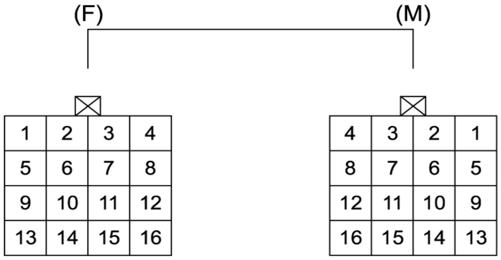
4497846

Connector No.	H-172			
Connector Color	Black			
Test Adapter No.	(M)J-35616-42		(F) J-35616-43	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	GRN	H-81(17)	—	—
2	GRN/RED	Maker Light Relay	—	—
3	GRN/BLK	H-81(5)	—	—
4	GRN/WHT	H-81(3)	—	—
5	BLK	W/S-4	—	—
6	—	Not Used	—	—
7	—	Not Used	—	—
8	RED/WHT	Relay Box Fuse FL-16 Towing Converter	—	—



LNW78DSH000401
4497222

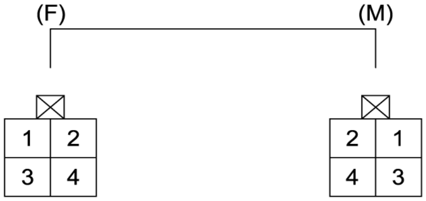
Connector No.	H-173			
Connector Color	Black			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	VIO/WHT	Exhaust Differential Pressure Sensor	VIO/WHT	ECM
2	GRN/YEL	Exhaust Differential Pressure Sensor	GRN/YEL	ECM
3	WHT/ORN	Exhaust Differential Pressure Sensor	WHT/ORN	ECM
4	BLK/ORN	NOx Sensor 1	BLK/ORN	NOx & Diesel Exhaust Fluid (DEF) Sensor Relay
				H-171 (11)
				H-176 (3)
5	BLK	NOx Sensor 1	BLK	H-176 (4)
				Earth Body SCR2
6	BLU	Resistor/NOx Sensor 1	BLU	H-176(11)
7	BLU/WHT	Resistor/NOx Sensor 1	BLU/WHT	H-176(12)
8	—	Not Used	—	Not Used
9	VIO/YEL	Exhaust Gas Temperature Sensor 1	VIO/YEL	ECM
10	RED	Exhaust Gas Temperature Sensor 1	RED	ECM
11	VIO/GRN	Exhaust Gas Temperature Sensor 2	VIO/GRN	ECM
12	YEL/RED	Exhaust Gas Temperature Sensor 2	YEL/RED	ECM
13	—	Not Used	—	Not Used
14	—	Not Used	—	Not Used
15	—	Not Used	—	Not Used
16	—	Not Used	—	Not Used



LNW78DSH000401
4497222

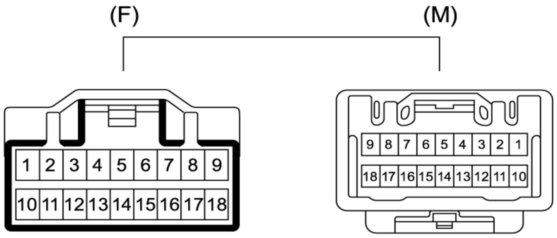
Connector No.	H-176			
Connector Color	Black			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	LT GRN/RED	Exhaust Gas Temperature (EGT) Sensor 3	LT GRN/RED	Diesel Exhaust Fluid (DEF) Control Module
2	VIO	Exhaust Gas Temperature (EGT) Sensor 3	VIO	Diesel Exhaust Fluid (DEF) Control Module
3	BLK/ORN	NOx Sensor 2	BLK/ORN	H-173 (4) NOx Sensor 1 NOx & Diesel Exhaust Fluid (DEF) Sensor Relay
4	BLK	NOx Sensor 2	BLK	H-173(5)
5	RED	Diesel Exhaust Fluid (DEF) Injector	RED	Diesel Exhaust Fluid (DEF) Control Module
6	BLU	Diesel Exhaust Fluid (DEF) Injector	BLU	Diesel Exhaust Fluid (DEF) Control Module
7	BLK/BLU	PM Sensor	BLK/BLU	Fuse PM Sensor (15A)
8	BLK	PM Sensor	BLK	W/S-4
9	BLU/WHT	NOx Sensor 2 H-171 (10)	BLW/WHT	Diesel Exhaust Fluid (DEF) Control Module
10	BLU	NOx Sensor 2 H-171 (13)	BLU	Diesel Exhaust Fluid (DEF) Control Module
11	BLU	NOx Sensor 2 H-171 (13)	BLU	H-173 (6)
12	BLU/WHT	NOx Sensor 2 H-171 (10)	BLU/WHT	H-173 (7)
13	GRN/WHT	PM Sensor H-176 (15)	GRN/WHT	Diesel Exhaust Fluid (DEF) Control Module H-91 (2)
14	GRN	PM Sensor H-176 (16)	GRN	Diesel Exhaust Fluid (DEF) Control Module H-91 (13)

Connector No.	**H-176**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-18**		**(F) J-35616-19**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
15	GRN/WHT	PM Sensor H-176 (13)	GRN/WHT	ECM
16	GRN	PM Sensor H-176 (14)	GRN	ECM



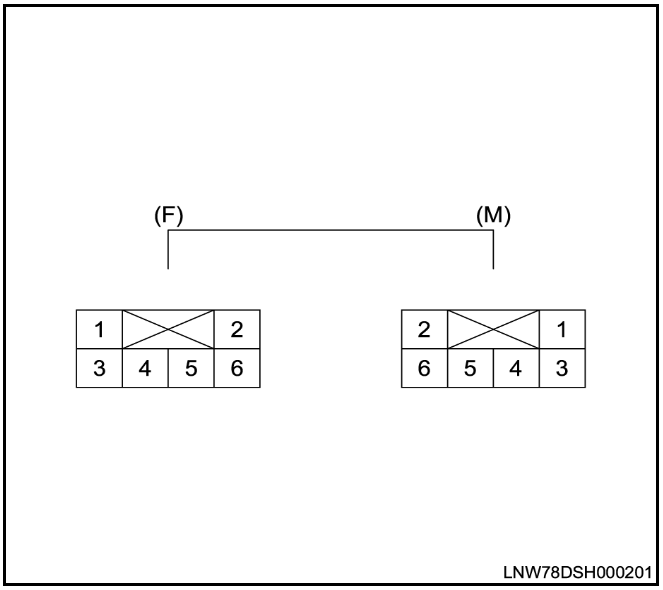
LNW78DSH001101
4497219

Connector No.	**H-177**			
Connector Color	**Black**			
Test Adapter No.	**(M) J-35616-18**		**(F) J-35616-19**	
	Male		**Female**	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	BLK/GRN	H-88 (1)	BLK/GRN	Transmission Fluid Temperature (TFT) Sensor -Torque Converter Clutch
2	WHT	H-88 (3) Transmission Fluid Temperature (TFT) Sensor Valve Body	WHT	Transmission Fluid Temperature (TFT) Sensor -Torque Converter Clutch
3	WHT/RED	H-91 (15)	WHT/RED	Input Shaft Speed (ISS) Sensor
4	BLK/RED	H-91 (4)	BLU/WHT	Input Shaft Speed (ISS) Sensor



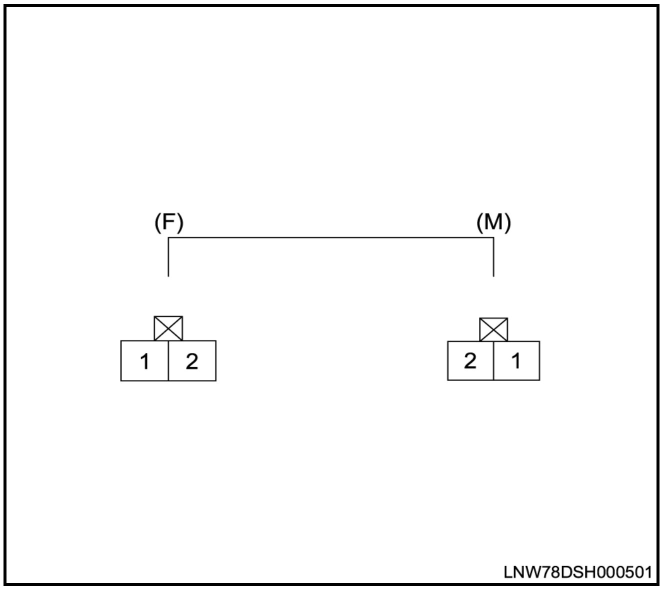
LNWE8DSH000101
4497848

Connector No.	H-195			
Connector Color	White			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	—	Not Used	—	Not Used
2	—	Not Used	—	Not Used
3	BLU	J/C 10P ADD3 B-519 (3)	RED	J/C FMS-B B-452 (1)
4	—	Not Used	LT GRN	Analog Tachograph A(9)
5	BLK	Cab Junction Block 1 B-16 (5)	BLK	J/C FMS-E B-453 (1)
6	BLU	CAN Joint FMS-L(3)	BLU	FMS CAN Interface Control Unit (23)
7	—	Not Used	—	Not Used
8	—	Not Used	—	Not Used
9	—	Not Used	—	Not Used
10	—	Not Used	—	Not Used
11	—	Not Used	—	Not Used
12	—	Not Used	YEL/RED	Analog Tachograph (20)
13	GRN	Sub Junction Block 1 B-137 (10)	GRN/YEL	J/C FMS-IG B-454 (1)
14	—	Not Used	—	Not Used
15	BLK/WHT	CAN Joint FMS-H (4)	BLK/WHT	FMS CAN Interface Control Unit (6)
16	—	Not Used	—	Not Used
17	RED	Sub Junction Block 1 B-134(1)	LT BLU	FMS CAN Interface Control Unit (3)
18	—	Not Used	—	Not Used


(F)
(M)
1
2
3
4
5
6
2
1
6
5
4
3
LNW78DSH000201

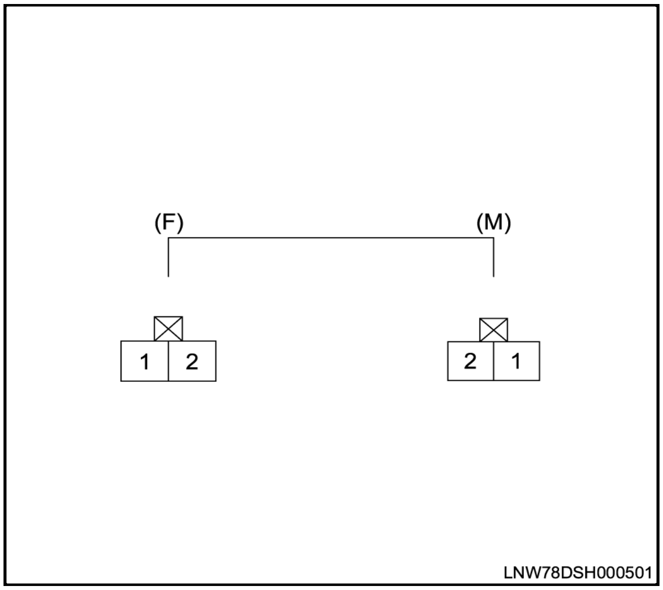
4646345

Connector No.	H-234			
Connector Color	White			
Test Adapter No.	(M) J-35616-4A		(F) J-35616-5	
	Male		Female	
Pin	**Wire Color**	**Pin Function**	**Wire Color**	**Pin Function**
1	—	—	RED	J/C FMS-B
2	—	—	GRY/YEL	J/C FMS-IG
3	—	—	—	—
4	—	—	BLK	J/C FMS-E
5	—	—	BRN	J/C CAN OUT-L
6	—	—	BRN/WHT	J/C CAN OUT-H


(F)
(M)
1
2
2
1
LNW78DSH000501

4646352

Connector No.	H-241			
Connector Color	White			
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	ORN/BLU	H-101 (14)	WHT	Wheel Speed Sensor Rear Left
2	WHT/BLU	H-101 (13)	BLK	Wheel Speed Sensor Rear Left

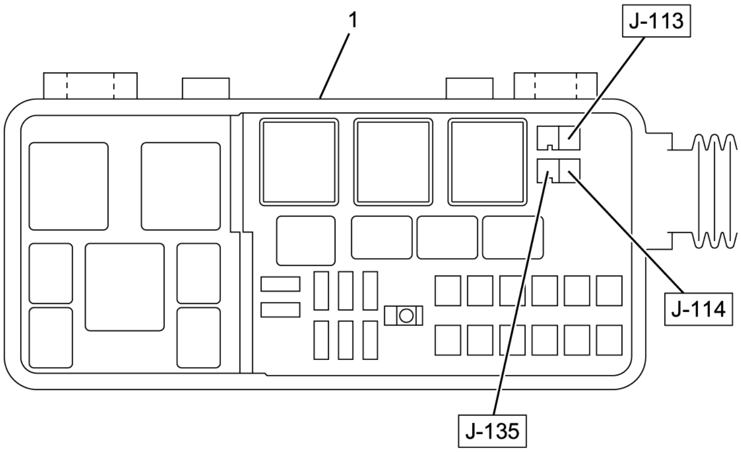


4646352

Connector No.	H-242			
Connector Color	(M) Black		(F) White	
Test Adapter No.	(M) J-35616-18		(F) J-35616-19	
	Male		Female	
Pin	Wire Color	Pin Function	Wire Color	Pin Function
1	VIO	H-101 (16)	WHT	Wheel Speed Sensor Rear Right
2	WHT	H-101 (15)	BLK	Wheel Speed Sensor Rear Right

Component Locator

Diode Location



Connector No.	Usage
J-113	ECM
J-114	A/C
J-135	ECM

LNWA8DSF000101

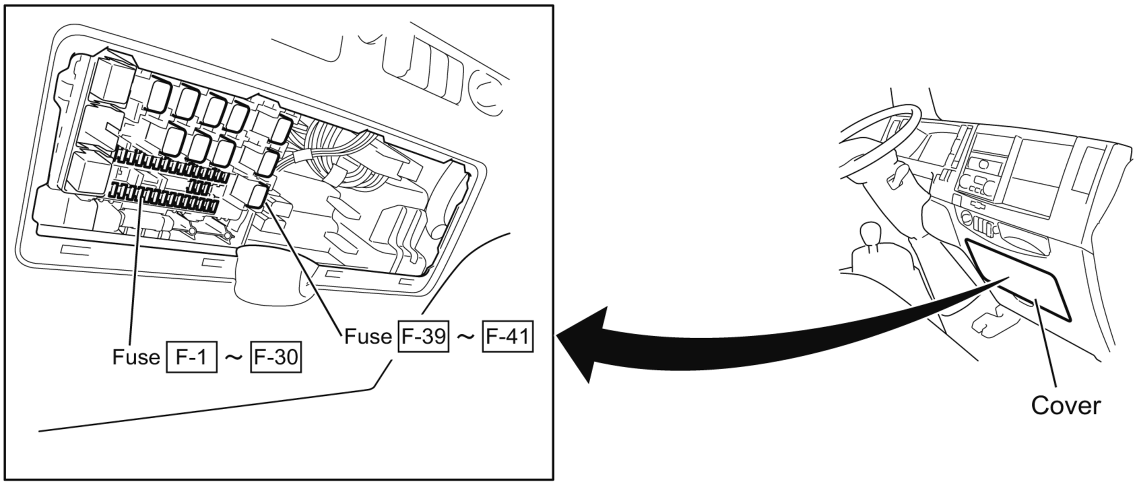
4495937

Legend

(1) Relay Box

Fuse, Fusible Link, and Slow-Blow Fuse Location

Fuse and Fuse Label



FUSE LABEL

—	—	ROOM LAMP,AUDIO	DOOR LOCK	TRAILER BRAKE	P/WINDOW	ABS	WIPER	H/LAMP LO (LH)	LAMPS (BATT)	H/LAMP LO (RH)	BRAKE LAMPS	STARTER	H/LAMP HI (LH)	H/LAMP HI (RH)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		10A	15A	15A	25A	10A	25A	10A	10A	10A	10A	10A	10A	10A

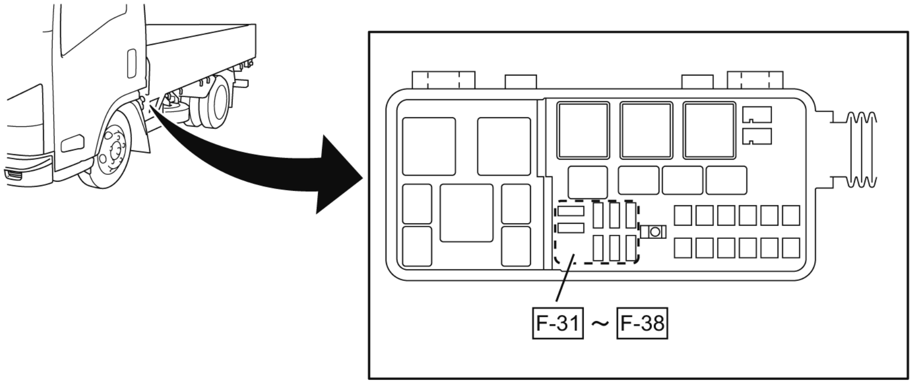
P. NO. 8981127740

SPARE SPARE SPARE SPARE

MIRROR HEATER	—	IGNITION1	—	ECM	METER	ECU (BATT)	MIRROR	AUDIO. ACC	HORN	TURN, HAZARD	TAIL LAMPS	ILLUMINATIONS	CORNERING LAMPS	AIR CONDITIONER
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
15A		10A		10A	10A	10A	10A	15A	15A	15A	10A	10A	10A	10A

D-1	20A	CIGAR
D-2	15A	ACCESSORIES SOCKET
D-3	20A	POWER SOURCE
D-4		

20A F-31	MARKER LAMP
20A F-32	TAIL MAIN
15A F-33	FUEL HEATER
20A F-34	SCR
15A F-35	PM SENSOR
15A F-36	RR DOME LIGHT
20A F-37	CONDENSER FAN
10A F-38	AIR CONDITIONER

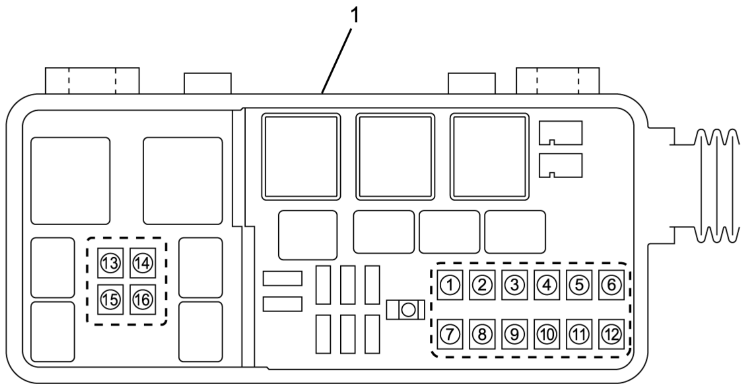


LNWF80XF004901

4495918

Note: The fuse numbers (1)-(30) indicated on the fuse labels are expressed as [F-1] – [F-30] in the circuit diagrams of this manual.

Slow Blow Fuse



No.	SBF No.	Name	Capacity
①	FL-1	ECM	40A
②	FL-2	STARTER	60A
③	FL-3	POWER ACC	50A
④	FL-4	GLOW	60A
⑤	FL-5	STARTER SWITCH 2	40A
⑥	FL-6	STARTER SWITCH 1	30A
⑦	FL-7	HVAC	40A
⑧	FL-8	HEADLIGHT	30A
⑨	FL-9	RR DOME LIGHT	30A
⑩	FL-10	WIPER	50A
⑪	FL-11	ABS	60A
⑫	FL-12	JUNCTION BLOCK	50A
⑬	FL-13	—	—
⑭	FL-14	ETB	30A
⑮	FL-15	—	—
⑯	FL-16	TOWING CONVERTER	30A

LNWE80MF000101

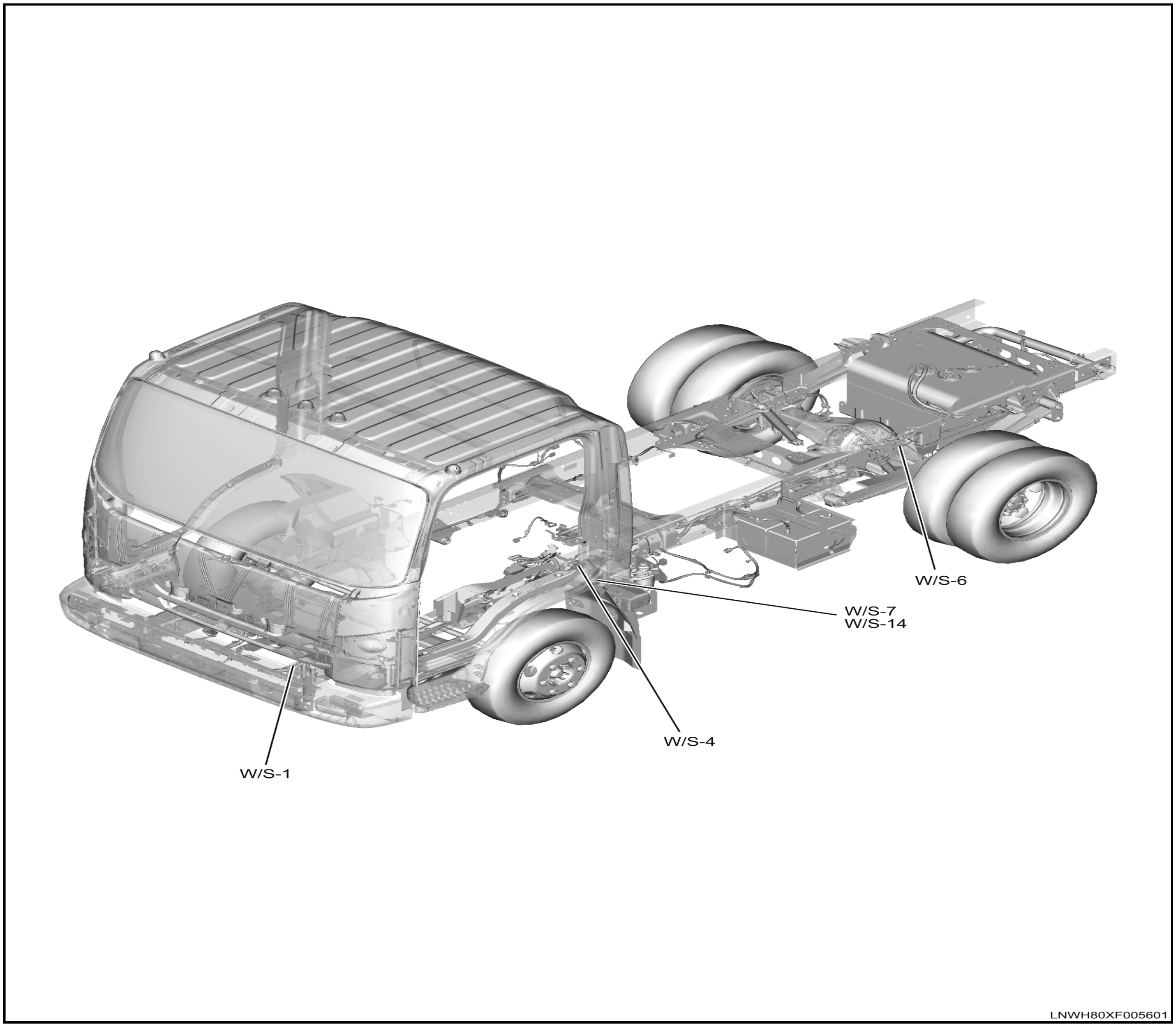
4495920

Legend

(1) Relay Box

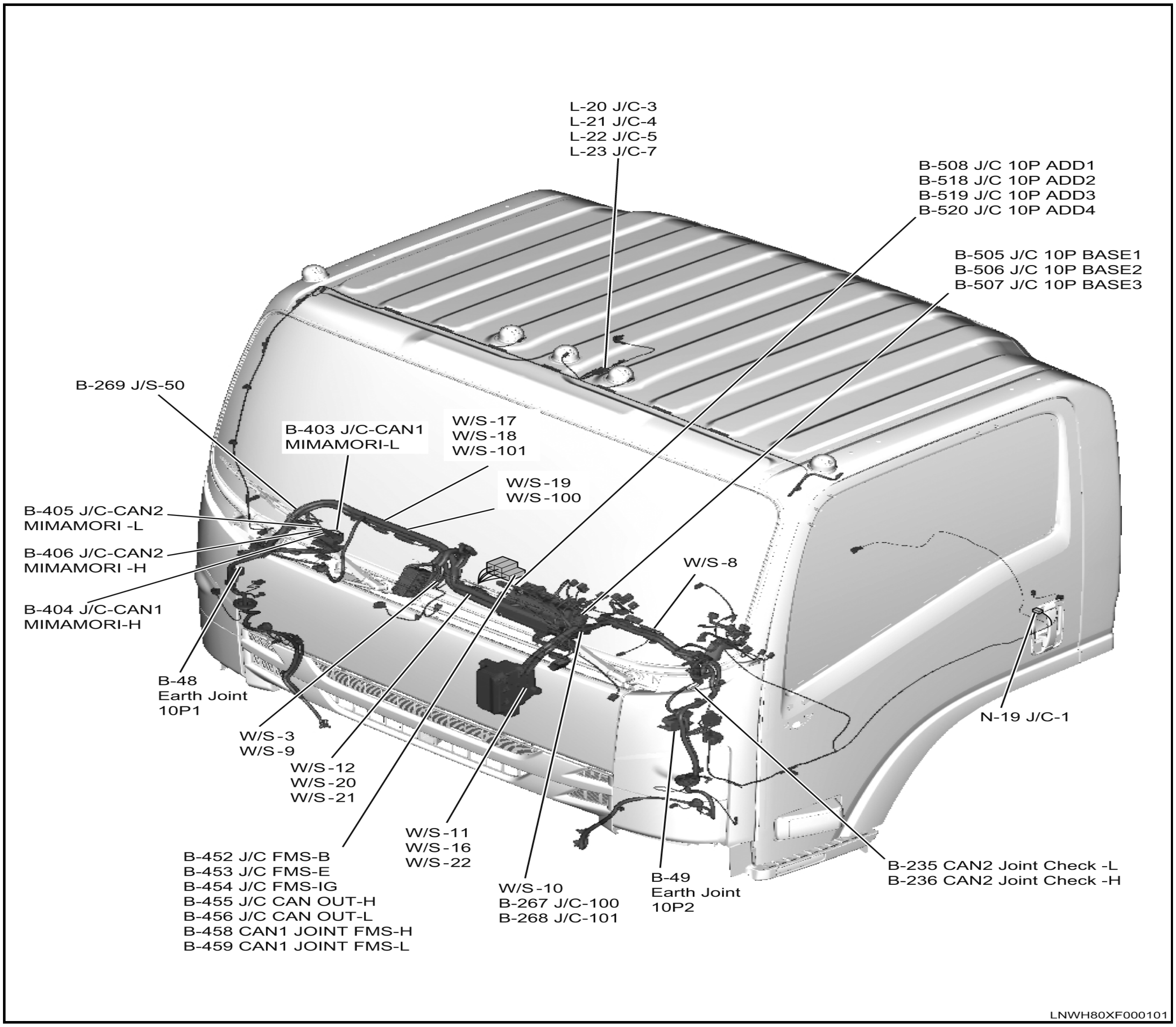
Note: The slow blow fuse numbers (1)-(12) indicated on the fuse labels are expressed as [FL-1] – [FL-12] in the circuit diagrams of this manual.

Joint Connection and Weld Splice Location
Frame Cable Harness


W/S-6
W/S-7
W/S-14
W/S-4
W/S-1
LNWH80XF005601

4645133

Body Cable Harness


L-20 J/C-3
L-21 J/C-4
L-22 J/C-5
L-23 J/C-7
B-508 J/C 10P ADD1
B-518 J/C 10P ADD2
B-519 J/C 10P ADD3
B-520 J/C 10P ADD4
B-505 J/C 10P BASE1
B-506 J/C 10P BASE2
B-507 J/C 10P BASE3
B-269 J/S-50
B-403 J/C-CAN1
MIMAMORI-L
W/S-17
W/S-18
W/S-101
W/S-19
W/S-100
B-405 J/C-CAN2
MIMAMORI -L
B-406 J/C-CAN2
MIMAMORI -H
W/S-8
B-404 J/C-CAN1
MIMAMORI-H
B-48
Earth Joint
10P1
N-19 J/C-1
W/S-3
W/S-9
W/S-12
W/S-20
W/S-21
W/S-11
W/S-16
W/S-22
B-452 J/C FMS-B
B-453 J/C FMS-E
B-454 J/C FMS-IG
B-455 J/C CAN OUT-H
B-456 J/C CAN OUT-L
B-458 CAN1 JOINT FMS-H
B-459 CAN1 JOINT FMS-L
W/S-10
B-267 J/C-100
B-268 J/C-101
B-49
Earth Joint
10P2
B-235 CAN2 Joint Check -L
B-236 CAN2 Joint Check -H
LNWH80XF000101

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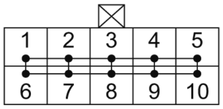
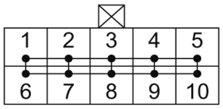
Joint Connection Circuit

B-48 Joint Connection 10P1



Joint Point	Terminal No.	Connection
●	1	DRL Control Unit
●	2	Heater Mirror RH Ground
●	3	Ext ETB-4
●	4	Joint Connection 10P2
●	5	———
●	6	WIS-13
●	7	———
●	8	———
●	9	Headlight RH Ground
●	10	Body Ground

B-49 Joint Connection 10P2



Joint Point	Terminal No.	Connection
●	1	Power Window Driver Switch Ground
●	2	———
●	3	WIS-16
●	4	Illumination Control Switch
●	5	Body Ground
●	6	Headlight LH Ground
●	7	Vacuum Pump Ground
●	8	Heater Mirror LH Ground
●	9	WIS-11
●	10	Joint Connection 10P1

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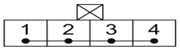
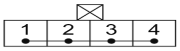
B-235 CAN2 Joint Check -L



Joint Point	Terminal No.	Connection
●	1	Diesel Exhaust Fluid (DEF) Control Module
●	2	-
●	3	J/C-CAN 2 MIMAMORI -L
●	4	Data Link Connector

B-236 CAN2 Joint Check -H



Joint Point	Terminal No.	Connection
●	1	Diesel Exhaust Fluid (DEF) Control Module
●	2	-
●	3	J/C-CAN 2 MIMAMORI -H
●	4	Data Link Connector

LNWG80XF010201

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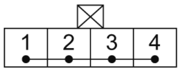
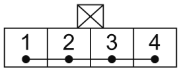
B-267 Joint Connection 100



Joint Point	Terminal No.	Connection
●	1	OPEN
●	2	ECM
●	3	OPEN
●	4	Accelerator Pedal Position Sensor

B-268 Joint Connection 101



Joint Point	Terminal No.	Connection
●	1	OPEN
●	2	ECM
●	3	OPEN
●	4	Accelerator Pedal Position Sensor

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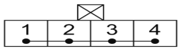
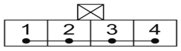
L-20 Joint Connection 3



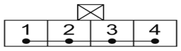
Joint Point	Terminal No.	Connection
●	1	ID 3
●	2	ID 2
●	3	Marker 1
●	4	Joint Connection 7

L-21 Joint Connection 4



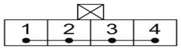
Joint Point	Terminal No.	Connection
●	1	ID 3
●	2	ID 2
●	3	Marker 1
●	4	Joint Connection 5

L-22 Joint Connection 5



Joint Point	Terminal No.	Connection
●	1	ID 1
●	2	Marker 2
●	3	Joint Connection 4
●	4	H-45 (6)

L-23 Joint Connection 7



Joint Point	Terminal No.	Connection
●	1	ID 1
●	2	Marker 2
●	3	Joint Connection 3
●	4	H-45 (4)

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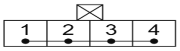
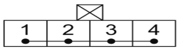
B-269 Joint Connection 50



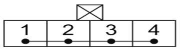
Joint Point	Terminal No.	Connection
●	1	Automatic Transmission
●	2	TCM
●	3	Automatic Transmission
●	4	—

B-452 J/C FMS-B



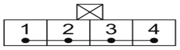
Joint Point	Terminal No.	Connection
●	1	Cab Junction Block 1
●	2	EXT Telematics
●	3	–
●	4	FMS CAN Interface Control Unit

B-453 J/C FMS-E



Joint Point	Terminal No.	Connection
●	1	J/C 10P ADD 3
●	2	EXT Telematics
●	3	–
●	4	FMS CAN Interface Control Unit

B-454 J/C FMS-IG



Joint Point	Terminal No.	Connection
●	1	Sub Junction Block 1
●	2	FMS CAN Interface Control Unit
●	3	–
●	4	EXT Telematics

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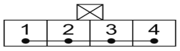
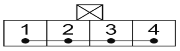
B-403 J/C-CAN 1
MIMAMORI - L



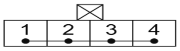
Joint Point	Terminal No.	Connection
●	1	MIMAMORI Control Unit
●	2	CAN Joint-FMS-L
●	3	TCM
●	4	Instrument Panel (IP) Cluster

B-404 J/C-CAN 1
MIMAMORI - H



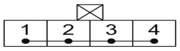
Joint Point	Terminal No.	Connection
●	1	MIMAMORI Control Unit
●	2	CAN Joint-FMS-H
●	3	TCM
●	4	Instrument Panel (IP) Cluster

B-405 J/C-CAN 2
MIMAMORI - L



Joint Point	Terminal No.	Connection
●	1	CAN 2 Joint Check -L
●	2	-
●	3	TCM
●	4	MIMAMORI Control Unit

B-406 J/C-CAN 2
MIMAMORI - H



Joint Point	Terminal No.	Connection
●	1	CAN 2 Joint Check -H
●	2	-
●	3	TCM
●	4	MIMAMORI Control Unit

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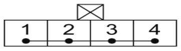
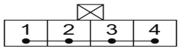
B-455 J/C CAN OUT-L



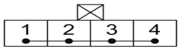
Joint Point	Terminal No.	Connection
●	1	FMS CAN Interface Control Unit
●	2	Terminator
●	3	–
●	4	EXT Telematics

B-456 J/C CAN OUT-H



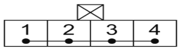
Joint Point	Terminal No.	Connection
●	1	FMS CAN Interface Control Unit
●	2	Terminator
●	3	–
●	4	EXT Telematics

B-458 CAN1 Joint-FMS-H



Joint Point	Terminal No.	Connection
●	1	EHCU
●	2	–
●	3	J/C-CAN1 MIMAMORI -H
●	4	FMS CAN Interface Control Unit

B-459 CAN1 Joint-FMS-L



Joint Point	Terminal No.	Connection
●	1	–
●	2	EHCU
●	3	FMS CAN Interface Control Unit
●	4	J/C-CAN1 MIMAMORI -L

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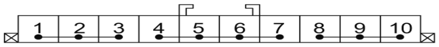
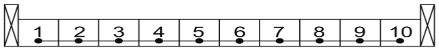
B-505 J/C 10P BASE 1



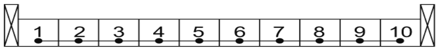
Joint Point	Terminal No.	Connection
●	1	-
●	2	-
●	3	-
●	4	Inst H.~Roof H.
●	5	Cab J/B1.J
●	6	Inst H.~Roof H.
●	7	Audio
●	8	Intermittent Relay
●	9	Wiper & Exhaust Brake SW
●	10	Cab J/B1.J

B-506 J/C 10P BASE 2



Joint Point	Terminal No.	Connection
●	1	Cab J/B1.J
●	2	Accessory Power Relay
●	3	IP Cluster.A
●	4	Blower Resistor
●	5	Sub J/B1.E
●	6	Intermittent Relay
●	7	Inst H.~Door(RH) H.
●	8	Inst H.~Roof H.
●	9	Stoplight Switch
●	10	WIS-18

B-507 J/C 10P BASE 3



Joint Point	Terminal No.	Connection
●	1	WIS-18
●	2	Combination Switch
●	3	-
●	4	Audio
●	5	Combination Switch
●	6	Hazard Switch
●	7	Inst H.~Door(LH) H.
●	8	Brake Fluid Level Switch
●	9	Combination Switch
●	10	Wiper & Exhaust Brake SW

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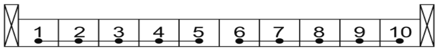
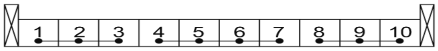
B-508 J/C 10P ADD 1



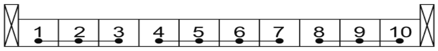
Joint Point	Terminal No.	Connection
●	1	Door Lock Relay
●	2	Front Door Lock Motor LH
●	3	Front Door Lock Motor RH
●	4	-
●	5	-
●	6	Door Lock Relay
●	7	Front Door Lock Motor LH
●	8	Front Door Lock Motor RH
●	9	-
●	10	-

B-518 J/C 10P ADD 2



Joint Point	Terminal No.	Connection
●	1	Door Lock Relay
●	2	Door Lock Switch
●	3	Keyless Entry Control Unit
●	4	Diode Door Lock
●	5	Door Lock Relay
●	6	Door Lock Switch
●	7	Keyless Entry Control Unit
●	8	Cab J/B1.F
●	9	Door Lock Relay
●	10	Keyless Entry Control Unit

B-519 J/C 10P ADD 3



Joint Point	Terminal No.	Connection
●	1	Cab J/B1.A
●	2	Data Link Connector
●	3	J/C FMS-B
●	4	Magnetic Clutch Relay
●	5	Cab J/B1.A
●	6	A/C Switch
●	7	Defroster Switch
●	8	Mirror Heater Switch
●	9	Mirror Heater Switch
●	10	Mirror Heater

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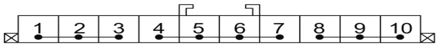
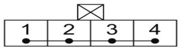
B-520 J/C 10P ADD 4



Joint Point	Terminal No.	Connection
●	1	Sub Junction Block 1. G
●	2	TCM
●	3	Shift Lever
●	4	PTO Switch 2
●	5	PTO Switch 2
●	6	PTO Engine Speed Control Switch
●	7	Inst H.~Frame Frt H.
●	8	Inst H.~Frame Frt H.
●	9	Diode 7
●	10	Vacuum Tank Switch

N-19 J/C-1



Joint Point	Terminal No.	Connection
●	1	W/S-11
●	2	Overdrive OFF Switch
●	3	Seat Belt Switch
●	4	Shift Lever

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Reference Table of Weld Splice

Connector No.	Usage
W/S-1	Diesel Exhaust Fluid (DEF) Control Module
	Diesel Exhaust Fluid (DEF) Control Module
	Diesel Exhaust Fluid (DEF) Control Module
	Diesel Exhaust Fluid (DEF) Control Module
	Earth Body SCR 1
W/S-3	Blower Motor
	Blower Resistor
	Fan Control Switch

Reference Table of Weld Splice (cont'd)

Connector No.	Usage
W/S-4	Earth Body 11
	Earth Body 20
	Towing Converter
	Condenser Fan Motor
	Fuel Heater
	Triple Pressure Switch
	Inhibitor Switch
	Air Cleaner Switch
	W/S-6
	PM Sensor

Reference Table of Weld Splice (cont'd)

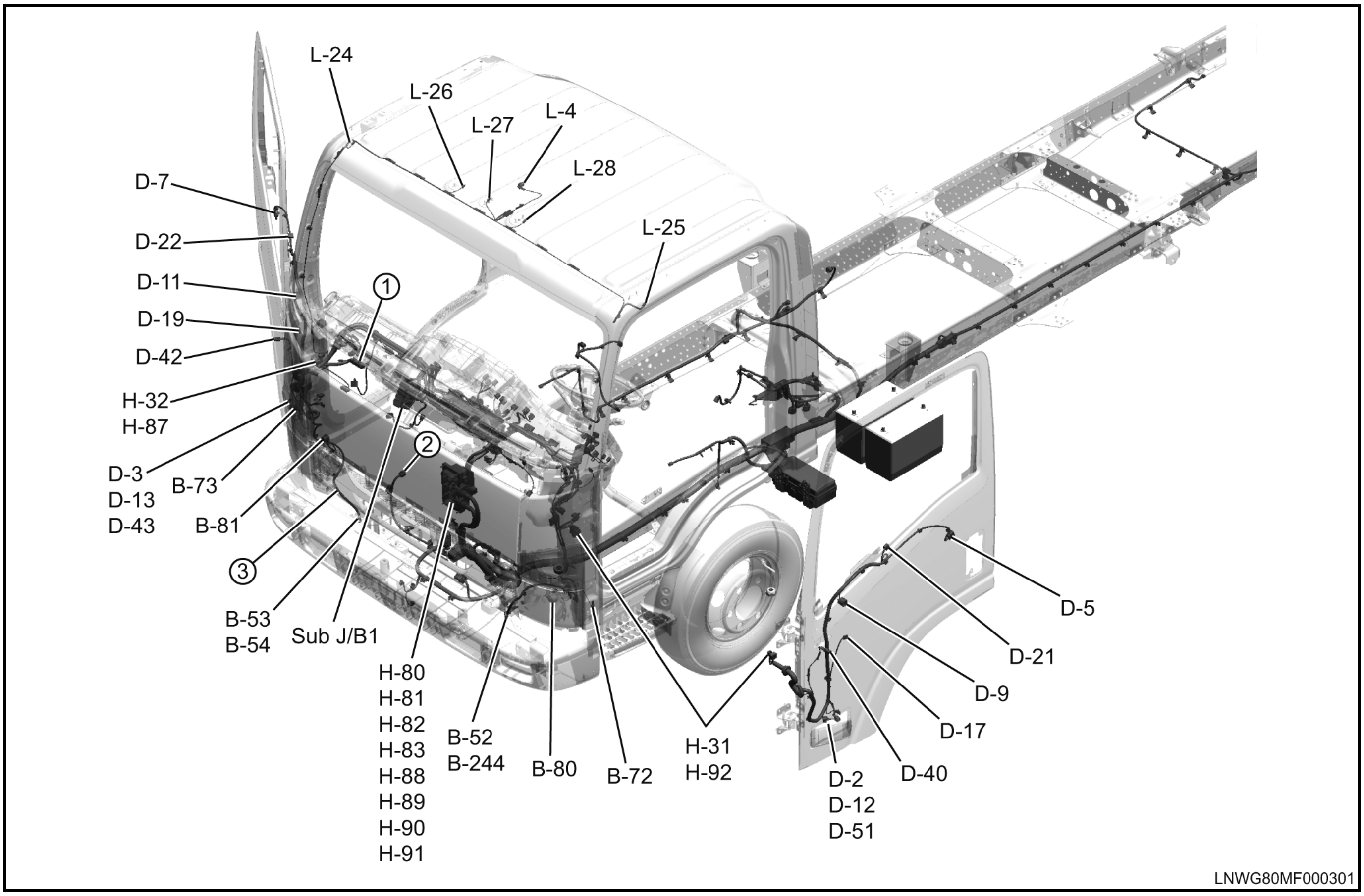
Connector No.	Usage
W/S-6	Body Earth 14
	Rear Combination Light (RH)
	To PTO 2 (Set Speed Switch)
	Back Buzzer (Upfitter Install)
	W/S-4
W/S-7	—
	Body Earth 4
	ECM
	ECM
	ECM
	ECM
	ECM
	Fuel Heater Relay
	Marker Light Relay
	Diode1
W/S-8	Slow Blow Fuse 5
	Ignition Switch
	Slow Blow Fuse 5
W/S-9	Cab Junction Block 1.P (Fuse 30)
	Blower Relay
	Blower Motor
W/S-10	Cigarette Lighter Relay
	Cab Junction Block 1.P (Fuse 3)
	Slow Blow Fuse 12
W/S-11	Door Lock Motor LH
	Door Lock Switch
	Mirror Heater Switch
	Front Turn Light LH
	Front Position Light LH
	Cab J/B1.C
	Cab J/B1.G
	OverDrive Off Switch
W/S-12	Cab Junction Block 1.A (Fuse 1)
W/S-13	TCM
	TCM
	Inst H. □ Door (RH) H.
	Door Lock Relay
	Door Lock Relay
	Keyless Entry Control Unit
	MIMAMORI C/U
	Front Position Light (RH)
	Front Turn Light (RH)

Reference Table of Weld Splice (cont'd)

Connector No.	Usage
W/S-14	ECM
	ECM
	ECM
	ECM
	ECM
	ECM
W/S-16	PTO Switch 2
	Pressure Switch
	Electronic Thermostat
	Side Marker LH
	A/C Switch
	Data Link Connector
	RS232C Ch1
W/S-17	Body Earth 15
	Body Earth 9
	Front Wiper Motor
	Fan Control Switch
W/S-18	Body Earth 22
	Body Earth 21
	J/C 10P BASE 2
	J/C 10P BASE 3
	ACC Socket B
	Cigarette Lighter B
W/S-19	Cigarette Lighter A
	Fuse 39
	Magnetic Clutch Relay
W/S-20	Headlight (LH)
	DRL Control Unit B
	Cab Junction Block 1.B (Fuse 9)
W/S-21	Headlight (RH)
	DRL Control Unit B
	Cab Junction Block 1.F (Fuse 11)
W/S-22	Mimamori C/U B-402 (17)
	Shift Lever N-16 (4)
	Rear Body Switch B-282 (2)
	Cab J/B1.K B-23 (4)
W/S-25	Relay Box
	Cub Junction Block 1.P
	Cub Junction Block 1.M
W/S-100	Front Wiper Motor
	Intermittent Relay
	Cab Junction Block 1.E (Wiper Main Relay)
W/S-101	Front Wiper Motor
	Front Washer Motor
	Cab Junction Block 1.E (Wiper Main Relay)

Parts Location

The parts location shows the location of the parts (1) and the connector (2) used in each harness routing (3).


L-24
L-26
L-27
L-4
L-28
L-25
D-7
D-22
D-11
D-19
D-42
H-32
H-87
D-3
D-13
D-43
B-73
B-81
1
2
3
B-53
B-54
Sub J/B1
H-80
H-81
H-82
H-83
H-88
H-89
H-90
H-91
B-52
B-244
B-80
B-72
H-31
H-92
D-2
D-12
D-51
D-40
D-17
D-9
D-21
D-5
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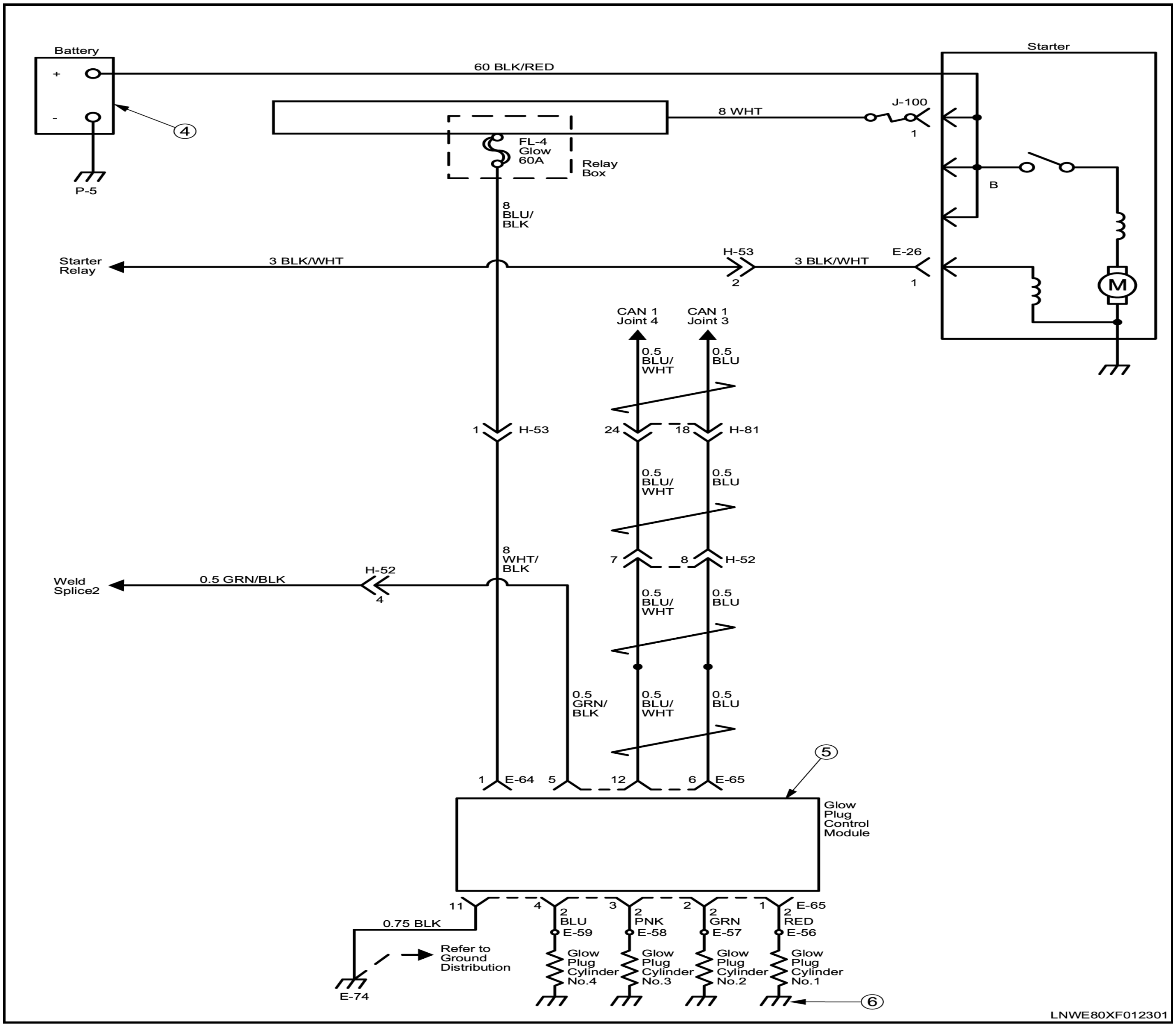
Circuit Diagram

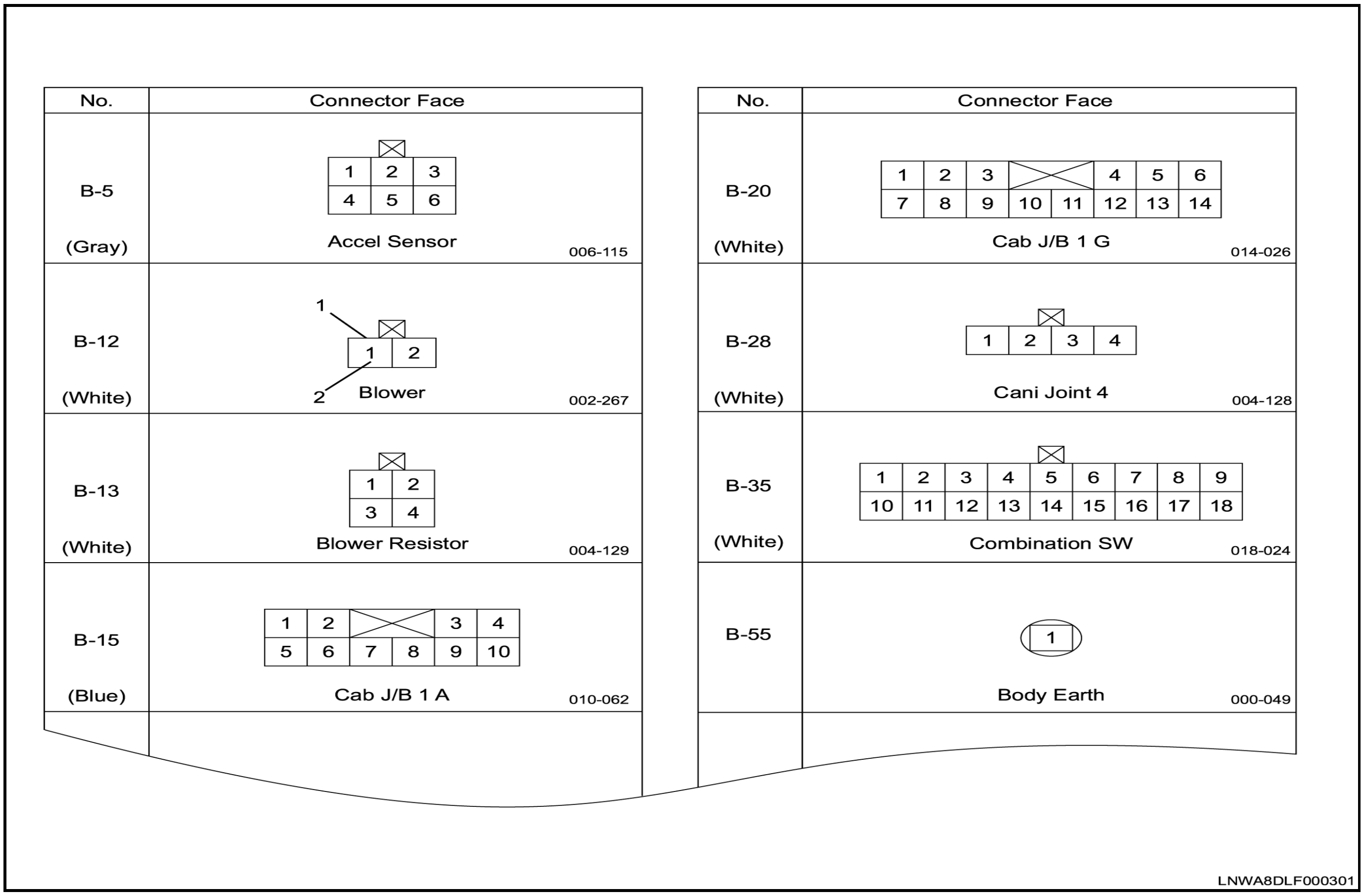
The circuit diagram shows the power supply (4) the load or loads (5) and the grounding point(s) (6).


Battery
+
-
④
P-5
60 BLK/RED
Starter
8 WHT
J-100
1
FL-4
Glow
60A
Relay
Box
B
8
BLU/
BLK
Starter
Relay
3 BLK/WHT
H-53
2
3 BLK/WHT
E-26
1
M
CAN 1
Joint 4
CAN 1
Joint 3
0.5
BLU/
WHT
0.5
BLU
1
H-53
24
18
H-81
8
WHT/
BLK
7
8
H-52
Weld
Splice2
0.5 GRN/BLK
H-52
4
0.5
GRN/
BLK
1
E-64
5
12
6
E-65
⑤
Glow
Plug
Control
Module
11
4
3
2
1
E-65
0.75 BLK
2
BLU
E-59
2
PNK
E-58
2
GRN
E-57
2
RED
E-56
Refer to
Ground
Distribution
E-74
Glow
Plug
Cylinder
No.4
Glow
Plug
Cylinder
No.3
Glow
Plug
Cylinder
No.2
Glow
Plug
Cylinder
No.1
⑥
LNWE80XF012301

4495890

Connector List

The connector list shows each connector's configuration (1) and the pin number (2).


No.
Connector Face
B-5
(Gray)
Accel Sensor
006-115
B-12
(White)
Blower
002-267
B-13
(White)
Blower Resistor
004-129
B-15
(Blue)
Cab J/B 1 A
010-062
B-20
(White)
Cab J/B 1 G
014-026
B-28
(White)
Cani Joint 4
004-128
B-35
(White)
Combination SW
018-024
B-55
Body Earth
000-049
LNWA8DLF000301

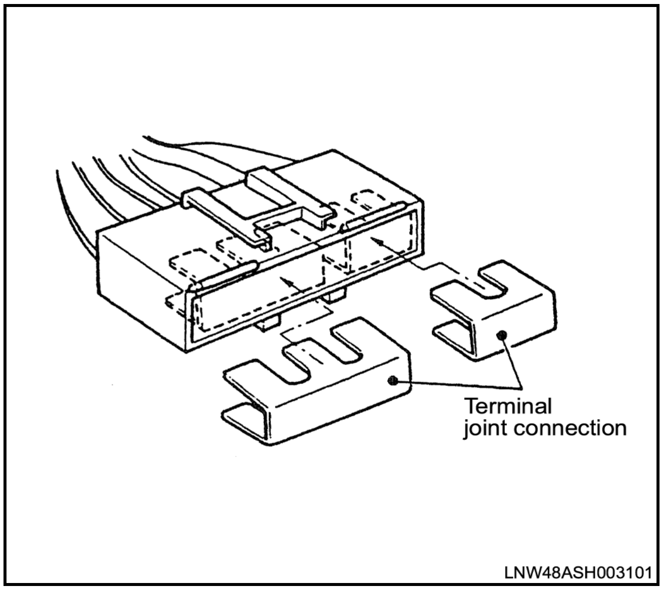
4495892

Connector Symbol

Connector Symbol	Harness name	Connector Symbol	Harness name
B	Body (Inst.) Harness	L	Dome Light Harness
D	Door Harness	N	Floor Harness (LH & RH)
E	Engine Harness	P	Battery Harness
H	For joint between harnesses	X	Body & frame front harness
J	Frame front & frame rear harness		

Joint Connection

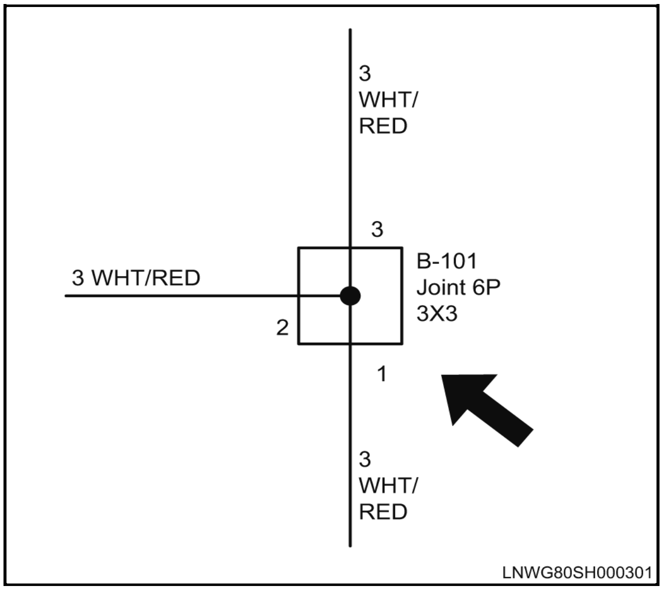
This connector has the structure of plural number of terminals collectively connected inside the connector.


Terminal
joint connection
LNW48ASH003101

4495894

How to show joint connection in the circuit diagram

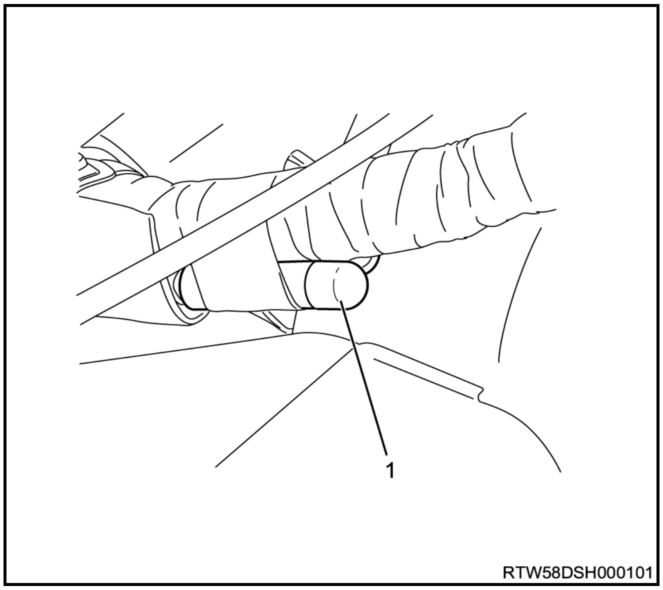
1. When joint connection can be shown as actual circuit diagram.


3
WHT/
RED
3
3 WHT/RED
B-101
Joint 6P
3X3
2
1
3
WHT/
RED
LNWG80SH000301

4495898

Weld Splice

Weld splice is a harness that welds the point of the harness and does joint.


1
RTW58DSH000101

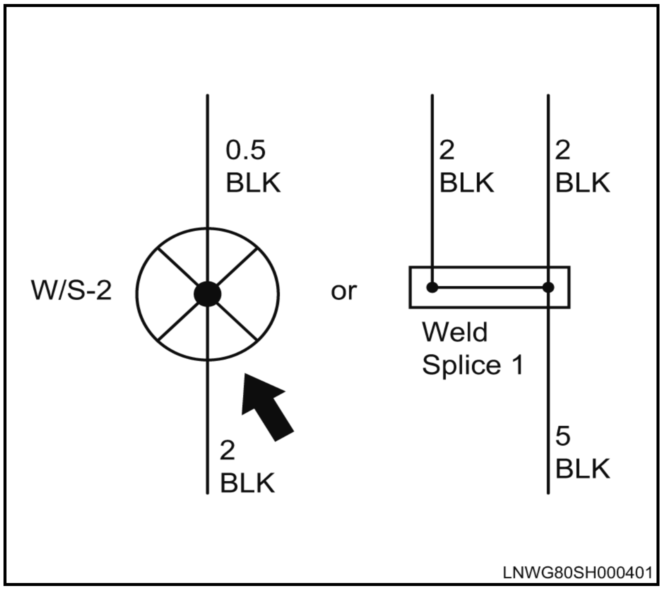
4495896

Legend

(1) Weld Splice

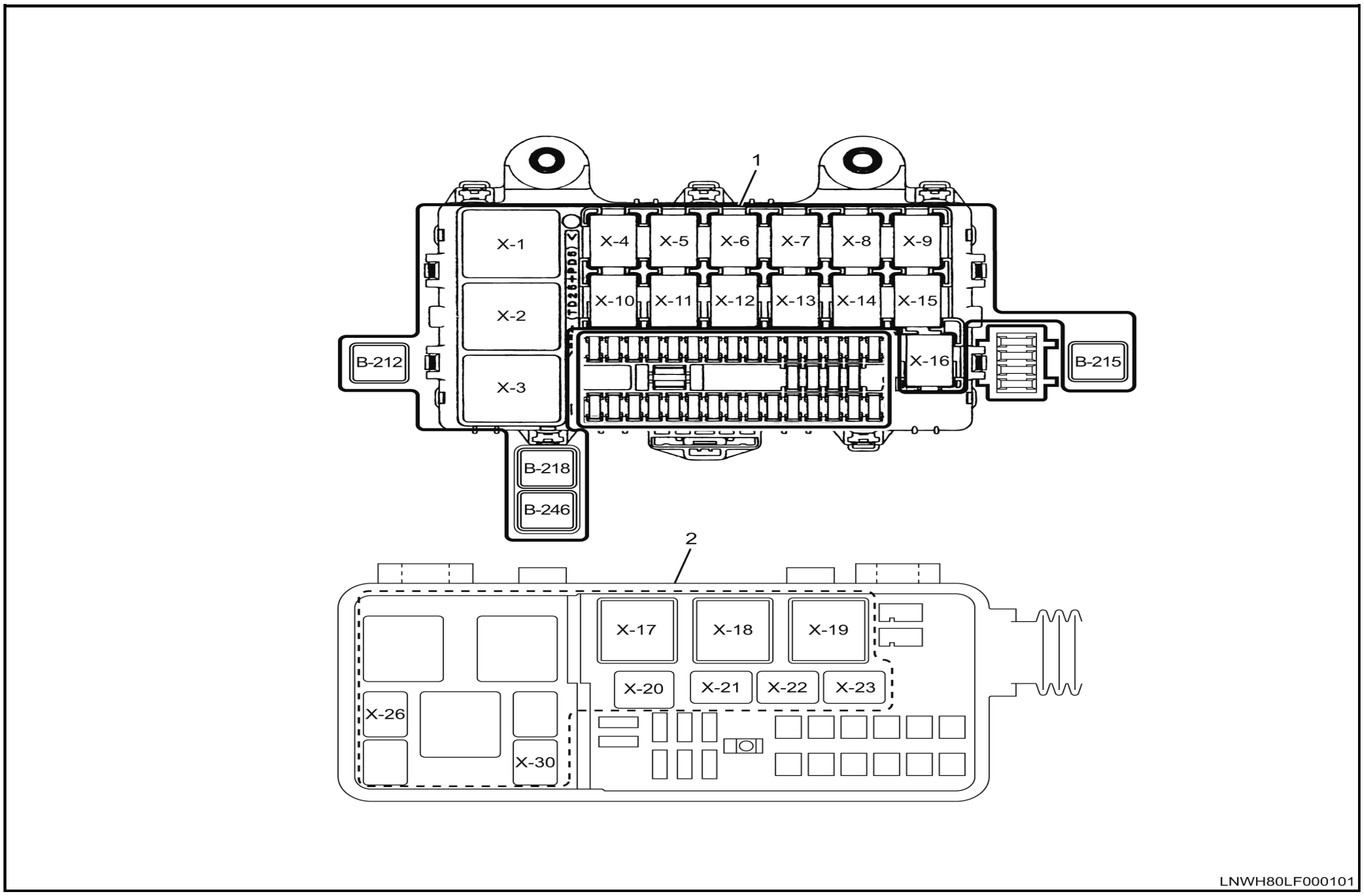
How to show weld splice in the circuit diagram

1. When weld splice can be shown as actual circuit diagram.


0.5
BLK
2
BLK
2
BLK
W/S-2
or
Weld
Splice 1
2
BLK
5
BLK
LNWG80SH000401

4495899

Relay Location


1
X-1
X-4
X-5
X-6
X-7
X-8
X-9
X-10
X-11
X-12
X-13
X-14
X-15
X-2
B-212
X-16
B-215
X-3
B-218
B-246
2
X-17
X-18
X-19
X-20
X-21
X-22
X-23
X-26
X-30
LNWH80LF000101

4645114

Legend

(1) Cab Junction Block

(2) Relay Box

Relay List

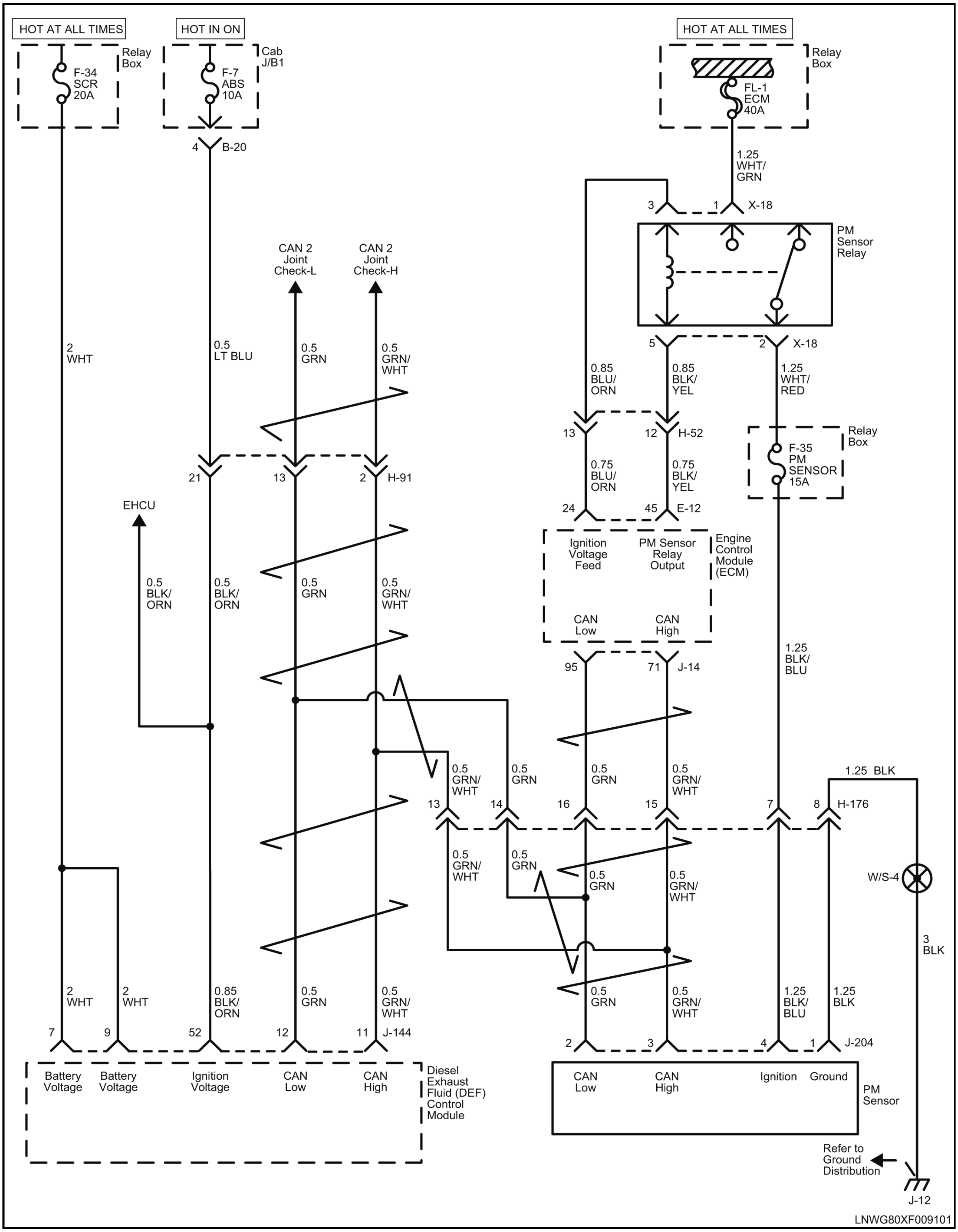
Connector No.	Relay Name
X-1	Stoplight
X-2	Daytime Running Light
X-3	Key On
X-4	TCM
X-5	P/N Start
X-6	Wiper Main
X-7	Horn
X-8	Wiper High/Low
X-9	Trailer Stop
X-10	—
X-11	—
X-12	Front Power Window
X-13	Headlight (Low)
X-14	Vacuum Pump
X-15	Headlight (High)

Relay List (cont'd)

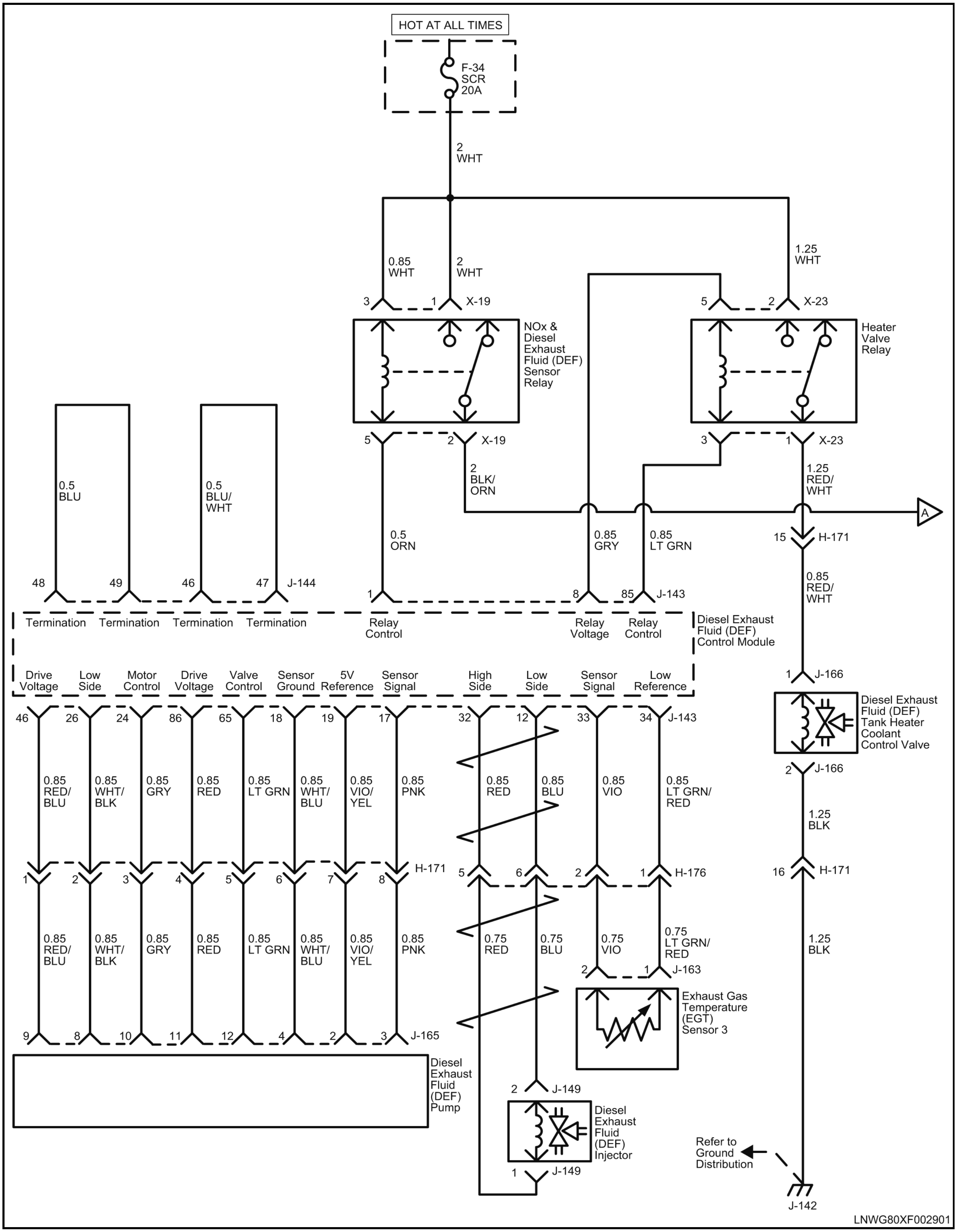
Connector No.	Relay Name
X-16	Taillight
B-212	Accessory Power
B-215	Blower Motor
B-218	Cigarette Lighter
B-246	Cornering Light
X-17	Starter
X-18	PM Sensor
X-19	NOx and Diesel Exhaust Fluid (DEF) Sensor
X-20	Magnetic Clutch
X-21	Condenser Fan
X-22	Rear Dome Light
X-23	Heater Valve
X-26	Marker Lamp
X-30	Fuel Heater

Schematic and Routing Diagrams

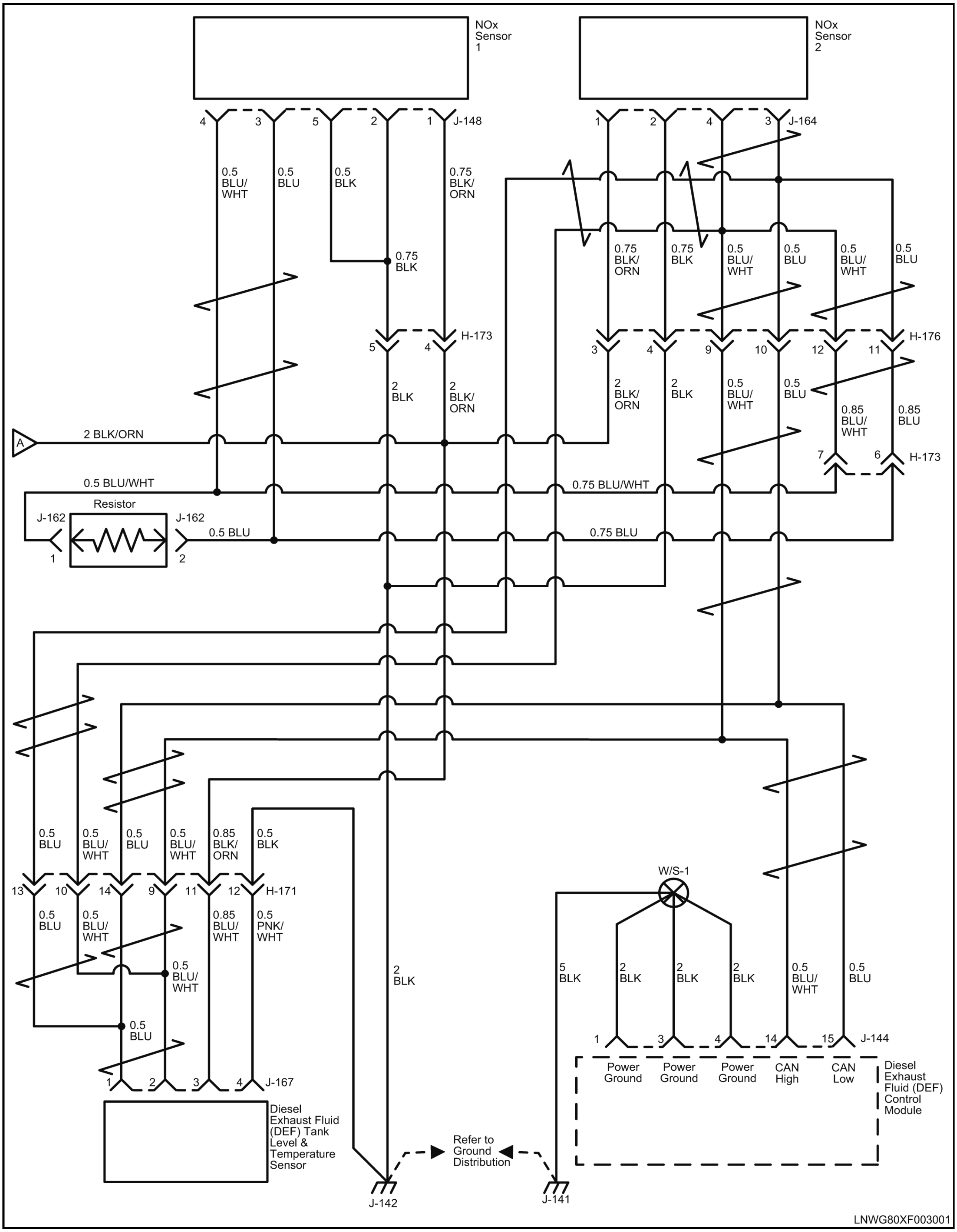
Selective Catalyst Reduction (SCR) Schematics


HOT AT ALL TIMES
Relay Box
F-34 SCR 20A
HOT IN ON
Cab J/B1
F-7 ABS 10A
HOT AT ALL TIMES
Relay Box
FL-1 ECM 40A
B-20
1.25 WHT/ GRN
X-18
PM Sensor Relay
CAN 2 Joint Check-L
CAN 2 Joint Check-H
2 WHT
0.5 LT BLU
0.5 GRN
0.5 GRN/ WHT
0.85 BLU/ ORN
0.85 BLK/ YEL
1.25 WHT/ RED
H-52
Relay Box
F-35 PM SENSOR 15A
H-91
0.75 BLU/ ORN
0.75 BLK/ YEL
E-12
EHCU
Ignition Voltage Feed
PM Sensor Relay Output
Engine Control Module (ECM)
CAN Low
CAN High
0.5 BLK/ ORN
J-14
1.25 BLK/ BLU
1.25 BLK
H-176
W/S-4
3 BLK
0.85 BLK/ ORN
J-144
J-204
Battery Voltage
Battery Voltage
Ignition Voltage
CAN Low
CAN High
Diesel Exhaust Fluid (DEF) Control Module
CAN Low
CAN High
Ignition
Ground
PM Sensor
Refer to Ground Distribution
J-12
LNWG80XF009101

4496356


HOT AT ALL TIMES
F-34
SCR
20A
2 WHT
0.85 WHT
2 WHT
1.25 WHT
3
1
X-19
5
2
X-23
NOx & Diesel Exhaust Fluid (DEF) Sensor Relay
Heater Valve Relay
5
2
X-19
3
1
X-23
2 BLK/ORN
1.25 RED/WHT
A
0.5 BLU
0.5 BLU/WHT
0.5 ORN
0.85 GRY
0.85 LT GRN
15
H-171
0.85 RED/WHT
48
49
46
47
J-144
1
8
85
J-143
Termination
Termination
Termination
Termination
Relay Control
Relay Voltage
Relay Control
Diesel Exhaust Fluid (DEF) Control Module
Drive Voltage
Low Side
Motor Control
Drive Voltage
Valve Control
Sensor Ground
5V Reference
Sensor Signal
High Side
Low Side
Sensor Signal
Low Reference
1
J-166
Diesel Exhaust Fluid (DEF) Tank Heater Coolant Control Valve
46
26
24
86
65
18
19
17
32
12
33
34
J-143
2
J-166
0.85 RED/BLU
0.85 WHT/BLK
0.85 GRY
0.85 RED
0.85 LT GRN
0.85 WHT/BLU
0.85 VIO/YEL
0.85 PNK
0.85 RED
0.85 BLU
0.85 VIO
0.85 LT GRN/RED
1.25 BLK
1
2
3
4
5
6
7
8
H-171
5
6
2
1
H-176
16
H-171
0.85 RED/BLU
0.85 WHT/BLK
0.85 GRY
0.85 RED
0.85 LT GRN
0.85 WHT/BLU
0.85 VIO/YEL
0.85 PNK
0.75 RED
0.75 BLU
0.75 VIO
0.75 LT GRN/RED
1.25 BLK
2
1
J-163
Exhaust Gas Temperature (EGT) Sensor 3
9
8
10
11
12
4
2
3
J-165
Diesel Exhaust Fluid (DEF) Pump
2
J-149
Diesel Exhaust Fluid (DEF) Injector
1
J-149
Refer to Ground Distribution
J-142
LNWG80XF002901

4496359


NOx Sensor 1
NOx Sensor 2
4
3
5
2
1
J-148
1
2
4
3
J-164
0.5 BLU/ WHT
0.5 BLU
0.5 BLK
0.75 BLK/ ORN
0.75 BLK
0.75 BLK/ ORN
0.75 BLK
0.5 BLU/ WHT
0.5 BLU
0.5 BLU/ WHT
0.5 BLU
5
4
H-173
3
4
9
10
12
11
H-176
2 BLK
2 BLK/ ORN
2 BLK/ ORN
2 BLK
0.5 BLU/ WHT
0.5 BLU
0.85 BLU/ WHT
0.85 BLU
7
6
H-173
A
2 BLK/ORN
0.5 BLU/WHT
0.75 BLU/WHT
Resistor
J-162
J-162
1
2
0.5 BLU
0.75 BLU
0.5 BLU
0.5 BLU/ WHT
0.5 BLU
0.5 BLU/ WHT
0.85 BLK/ ORN
0.5 BLK
13
10
14
9
11
12
H-171
0.5 BLU
0.5 BLU/ WHT
0.85 BLU/ WHT
0.5 PNK/ WHT
0.5 BLU/ WHT
0.5 BLU
1
2
3
4
J-167
Diesel Exhaust Fluid (DEF) Tank Level & Temperature Sensor
2 BLK
J-142
Refer to Ground Distribution
J-141
W/S-1
5 BLK
2 BLK
2 BLK
2 BLK
0.5 BLU/ WHT
0.5 BLU
1
3
4
14
15
J-144
Power Ground
Power Ground
Power Ground
CAN High
CAN Low
Diesel Exhaust Fluid (DEF) Control Module
LNWG80XF003001

4496363

Description and Operation

Exterior Lights Circuit Description

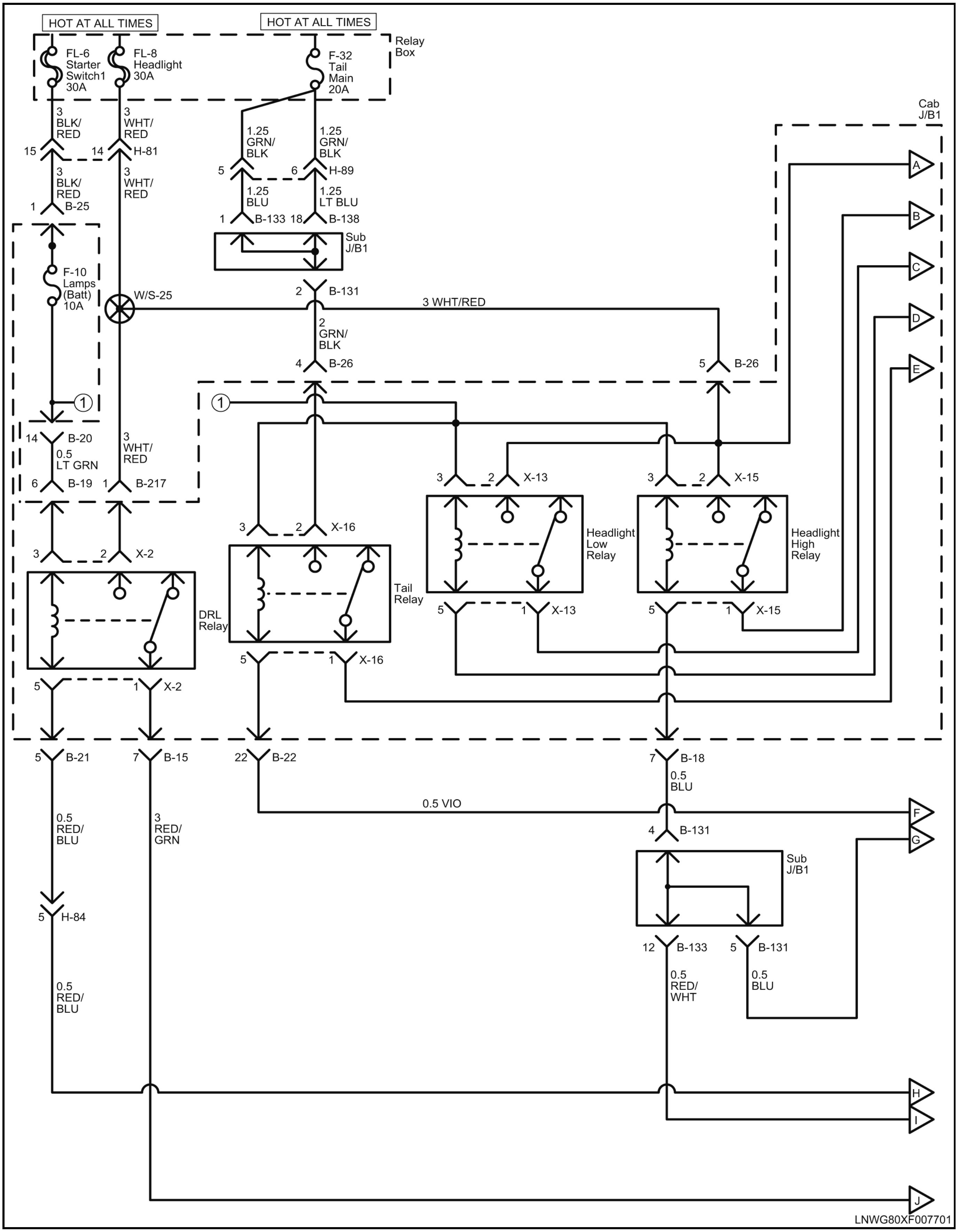
The circuit consists of lights (headlight, side marker light, clearance light, parking light, turn signal light [front, side and rear], cornering light, identification light, stoplight, taillight, backup light and license plate light), switches (ignition switch, combination switch, hazard warning switch, illumination control switch, brake switch, backup light switch and inhibitor switch), relays and other units.

The circuit has the DRL (Daytime Running Light) function. The DRL unit lights up the headlight automatically when the engine is running and the parking brake is released. When the lighting switch is turned to the headlight ON position, the DRL unit turns OFF the headlight.

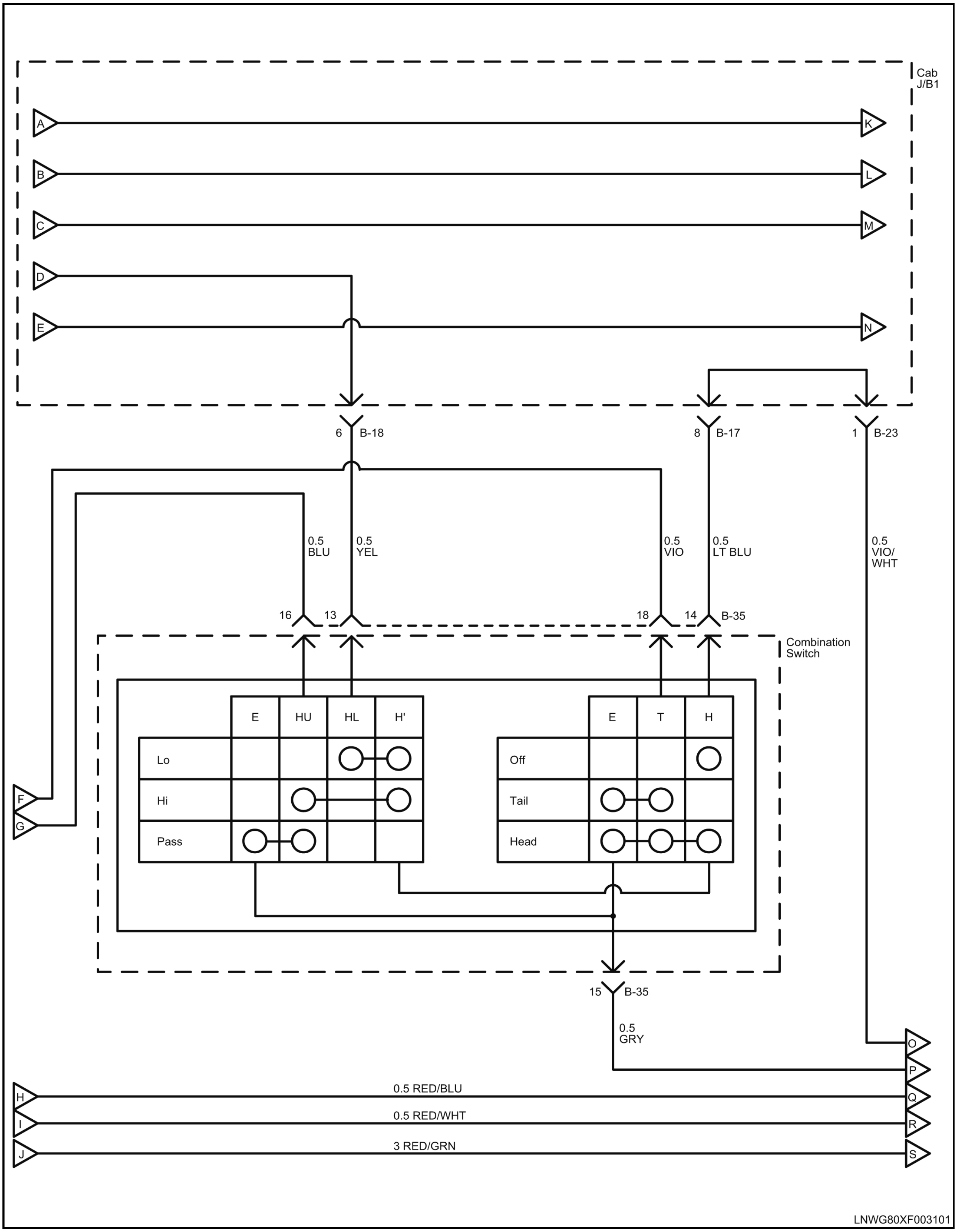
The combination switch consists of the lighting switch, the dimmer switch and the turn signal switch. The each of lights are operated by the combination switch or other switches.

Schematic and Routing Diagrams

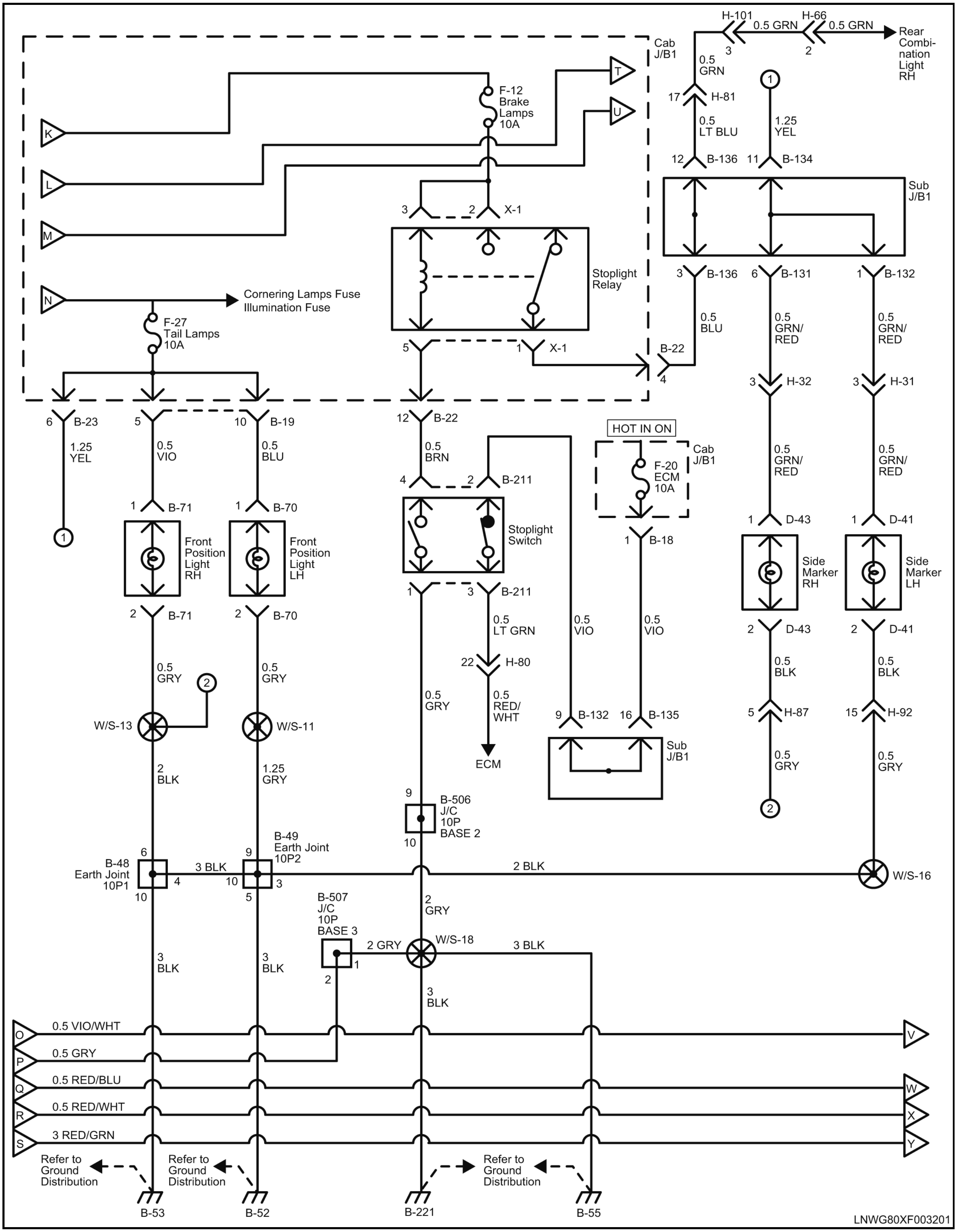
Exterior Lights Schematics


HOT AT ALL TIMES
HOT AT ALL TIMES
Relay Box
FL-6 Starter Switch1 30A
FL-8 Headlight 30A
F-32 Tail Main 20A
3 BLK/RED
3 WHT/RED
1.25 GRN/BLK
1.25 GRN/BLK
15
14
H-81
5
6
H-89
3 BLK/RED
3 WHT/RED
1.25 BLU
1.25 LT BLU
1 B-25
1 B-133
18 B-138
Sub J/B1
F-10 Lamps (Batt) 10A
W/S-25
2 B-131
3 WHT/RED
2 GRN/BLK
4 B-26
5 B-26
Cab J/B1
A
B
C
D
E
①
①
14 B-20
0.5 LT GRN
6 B-19
3 WHT/RED
1 B-217
3
2
X-13
3
2
X-15
Headlight Low Relay
Headlight High Relay
3
2
X-16
Tail Relay
3
2
X-2
DRL Relay
5
1
X-13
5
1
X-15
5
1
X-16
5
1
X-2
5 B-21
7 B-15
22 B-22
7 B-18
0.5 BLU
0.5 VIO
F
G
4 B-131
Sub J/B1
0.5 RED/BLU
3 RED/GRN
5 H-84
12 B-133
5 B-131
0.5 RED/WHT
0.5 BLU
0.5 RED/BLU
H
I
J
LNWG80XF007701

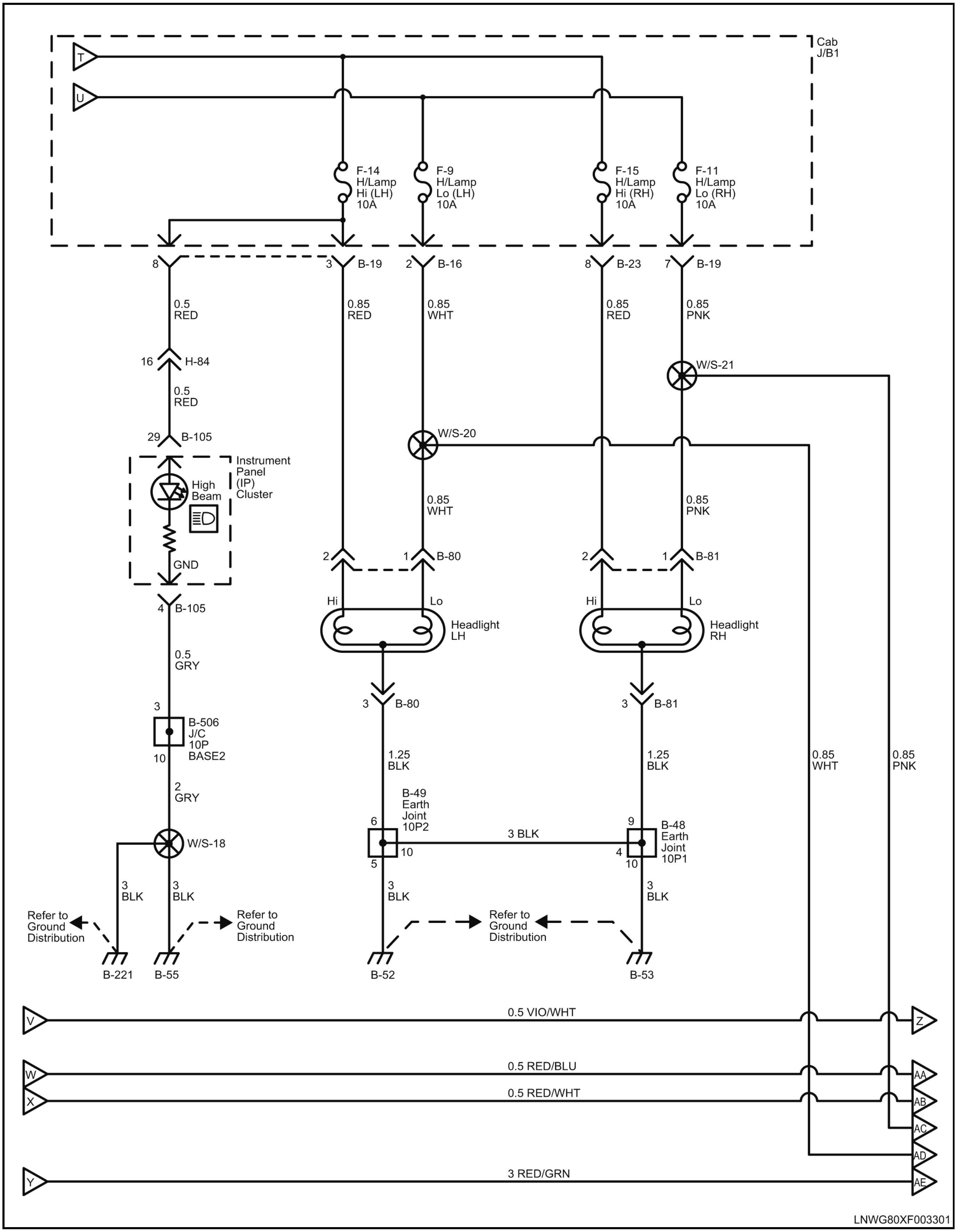
4496366


Cab
J/B1
A
B
C
D
E
K
L
M
N
6 B-18
8 B-17
1 B-23
0.5
BLU
0.5
YEL
0.5
VIO
0.5
LT BLU
0.5
VIO/
WHT
16
13
18
14 B-35
Combination
Switch
E
HU
HL
H'
Lo
Hi
Pass
E
T
H
Off
Tail
Head
F
G
15 B-35
0.5
GRY
O
P
Q
R
S
H
I
J
0.5 RED/BLU
0.5 RED/WHT
3 RED/GRN
LNWG80XF003101

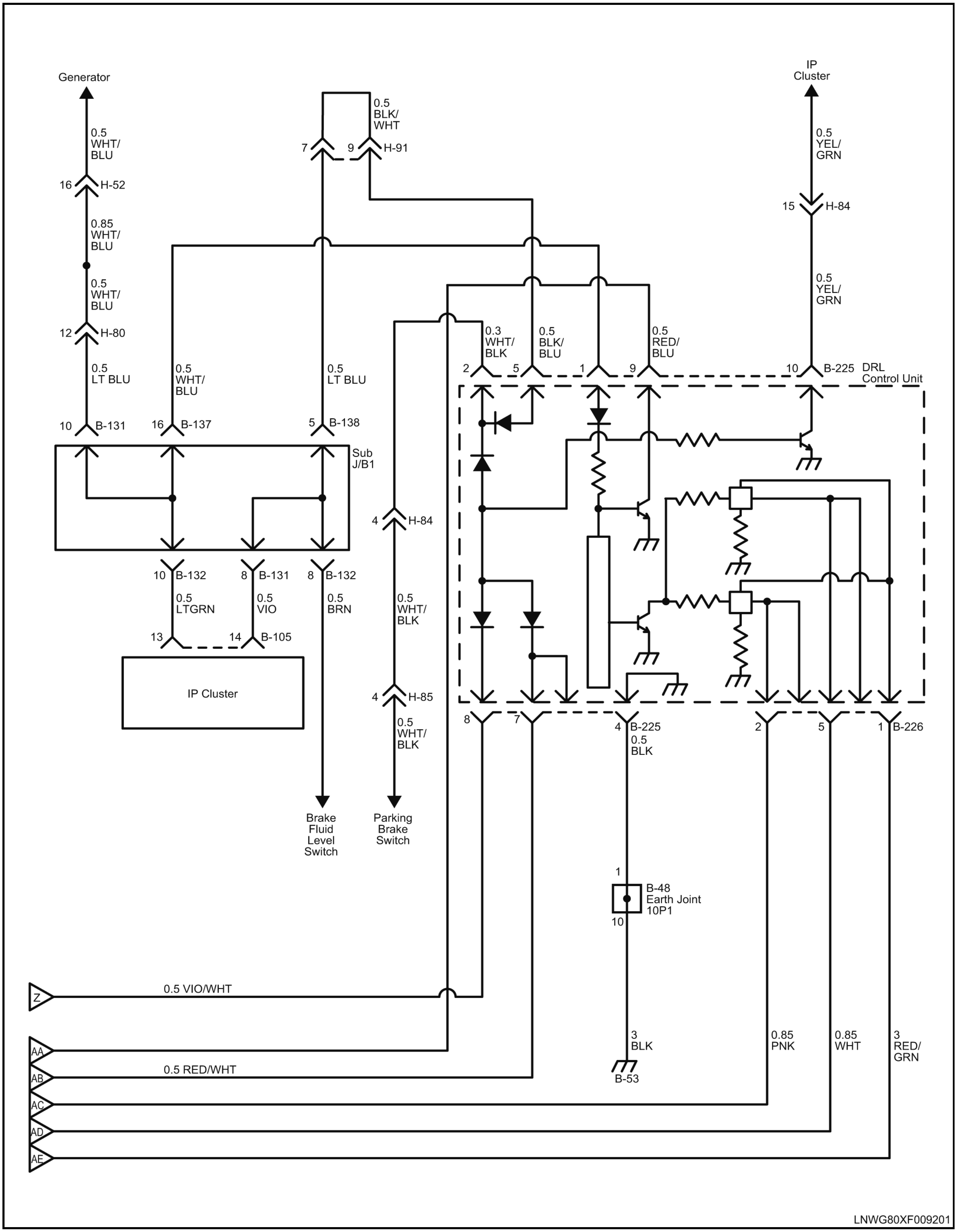
4496368


H-101
0.5 GRN
H-66
0.5 GRN
Rear Combi-nation Light RH
3
2
Cab J/B1
0.5 GRN
17
H-81
1
0.5 LT BLU
1.25 YEL
12
B-136
11
B-134
Sub J/B1
3
B-136
6
B-131
1
B-132
K
L
M
N
T
U
F-12 Brake Lamps 10A
3
2
X-1
Stoplight Relay
Cornering Lamps Fuse
Illumination Fuse
F-27 Tail Lamps 10A
5
1
X-1
B-22
4
0.5 BLU
0.5 GRN/ RED
0.5 GRN/ RED
3
H-32
3
H-31
6
B-23
5
10
B-19
12
B-22
HOT IN ON
1.25 YEL
0.5 VIO
0.5 BLU
0.5 BRN
4
2
B-211
Cab J/B1
F-20 ECM 10A
0.5 GRN/ RED
0.5 GRN/ RED
1
B-71
1
B-70
1
B-18
1
D-43
1
D-41
1
Front Position Light RH
Front Position Light LH
Stoplight Switch
Side Marker RH
Side Marker LH
2
B-71
2
B-70
1
3
B-211
2
D-43
2
D-41
0.5 LT GRN
0.5 VIO
0.5 VIO
0.5 GRY
0.5 GRY
22
H-80
0.5 BLK
0.5 BLK
2
0.5 GRY
0.5 RED/ WHT
9
B-132
16
B-135
5
H-87
15
H-92
W/S-13
W/S-11
ECM
Sub J/B1
0.5 GRY
0.5 GRY
2 BLK
1.25 GRY
2
9
B-506 J/C 10P BASE 2
10
B-49 Earth Joint 10P2
6
9
B-48 Earth Joint 10P1
3 BLK
4
10
3
2 BLK
W/S-16
10
5
B-507 J/C 10P BASE 3
2 GRY
2 GRY
W/S-18
3 BLK
3 BLK
3 BLK
1
2
3 BLK
O
0.5 VIO/WHT
V
P
0.5 GRY
Q
0.5 RED/BLU
W
R
0.5 RED/WHT
X
S
3 RED/GRN
Y
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
B-53
B-52
B-221
B-55
LNWG80XF003201

4496370

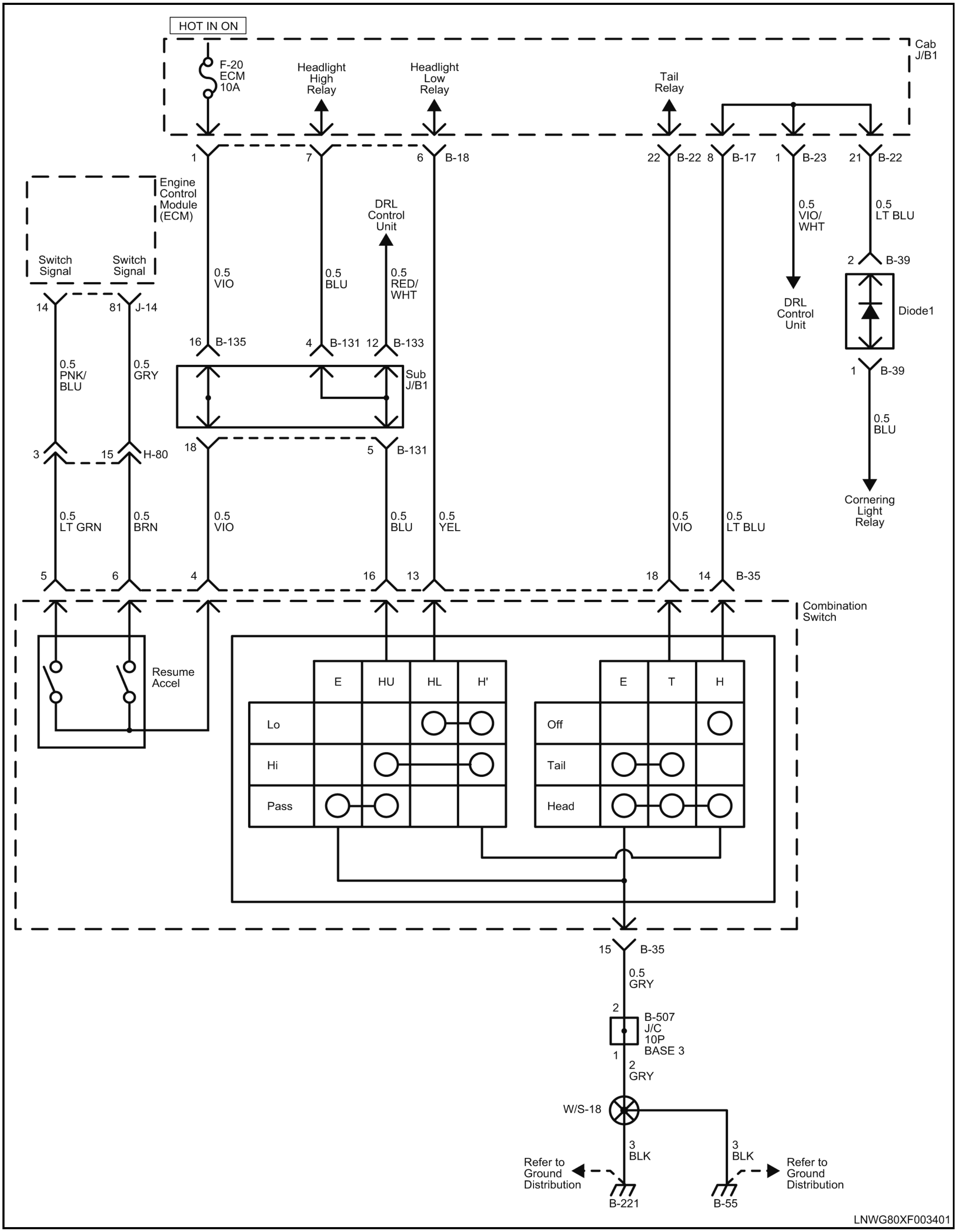

Cab J/B1
T
U
F-14 H/Lamp Hi (LH) 10A
F-9 H/Lamp Lo (LH) 10A
F-15 H/Lamp Hi (RH) 10A
F-11 H/Lamp Lo (RH) 10A
8
3 B-19
2 B-16
8 B-23
7 B-19
0.5 RED
0.85 RED
0.85 WHT
0.85 RED
0.85 PNK
16 H-84
W/S-21
0.5 RED
29 B-105
W/S-20
Instrument Panel (IP) Cluster
High Beam
GND
0.85 WHT
0.85 PNK
2
1 B-80
2
1 B-81
4 B-105
Hi
Lo
Headlight LH
Hi
Lo
Headlight RH
0.5 GRY
3 B-80
3 B-81
3
B-506 J/C 10P BASE2
10
1.25 BLK
1.25 BLK
0.85 WHT
0.85 PNK
2 GRY
B-49 Earth Joint 10P2
6
5
10
3 BLK
9
B-48 Earth Joint 10P1
4
10
W/S-18
3 BLK
3 BLK
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
B-52
B-53
V
0.5 VIO/WHT
Z
W
0.5 RED/BLU
AA
X
0.5 RED/WHT
AB
AC
AD
Y
3 RED/GRN
AE
LNWG80XF003301

4496373

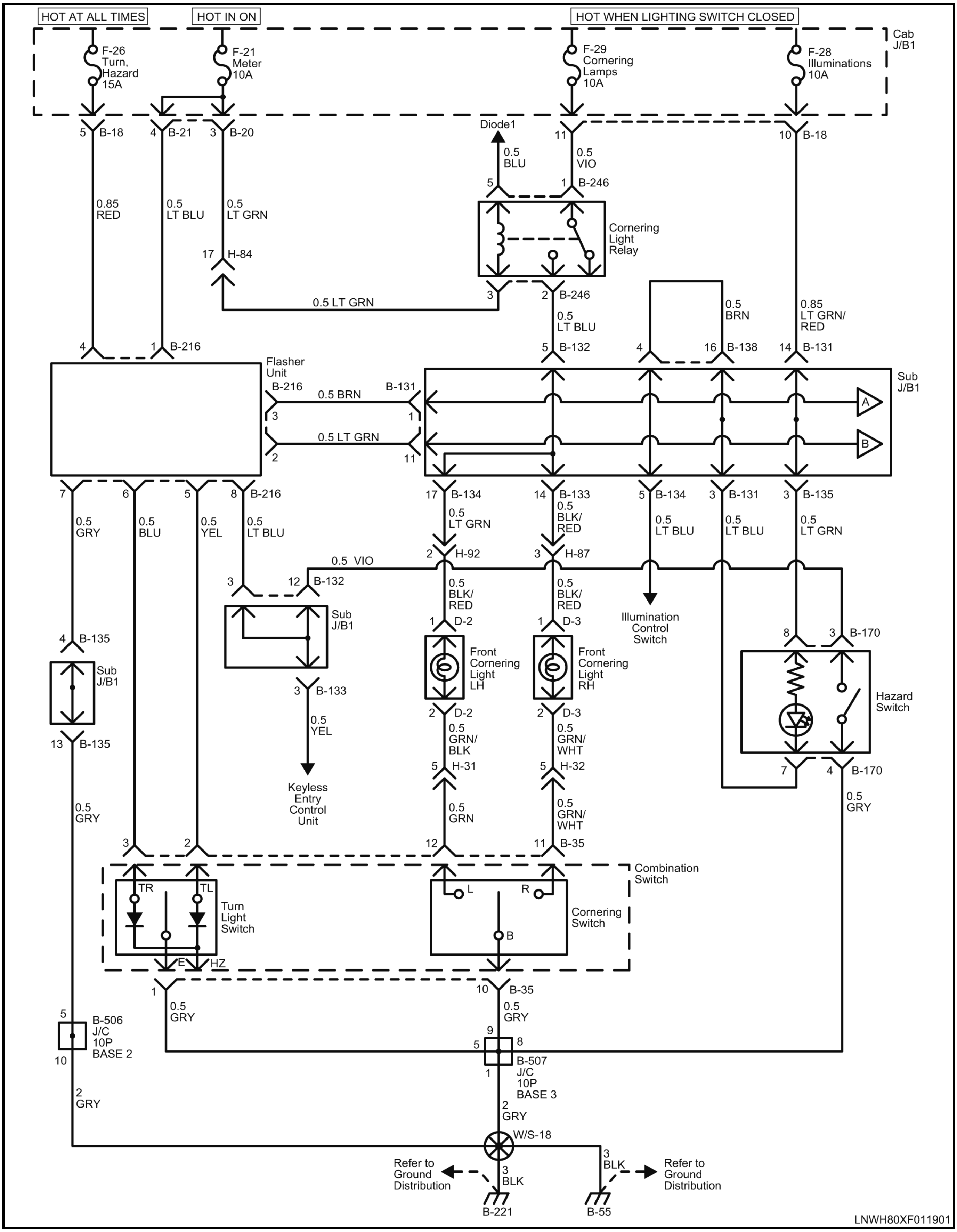

Generator
0.5 WHT/ BLU
16 H-52
0.85 WHT/ BLU
0.5 WHT/ BLU
12 H-80
0.5 LT BLU
10 B-131
0.5 WHT/ BLU
16 B-137
0.5 LT BLU
5 B-138
Sub J/B1
10 B-132
8 B-131
8 B-132
0.5 LTGRN
0.5 VIO
0.5 BRN
13
14 B-105
IP Cluster
Brake Fluid Level Switch
0.5 BLK/ WHT
7
9 H-91
4 H-84
0.5 WHT/ BLK
4 H-85
0.5 WHT/ BLK
Parking Brake Switch
0.3 WHT/ BLK
0.5 BLK/ BLU
0.5 RED/ BLU
2
5
1
9
10 B-225
DRL Control Unit
IP Cluster
0.5 YEL/ GRN
15 H-84
0.5 YEL/ GRN
8
7
4 B-225
0.5 BLK
2
5
1 B-226
1
B-48 Earth Joint 10P1
10
3 BLK
B-53
0.85 PNK
0.85 WHT
3 RED/ GRN
Z
0.5 VIO/WHT
AA
AB
0.5 RED/WHT
AC
AD
AE

LNWG80XF009201

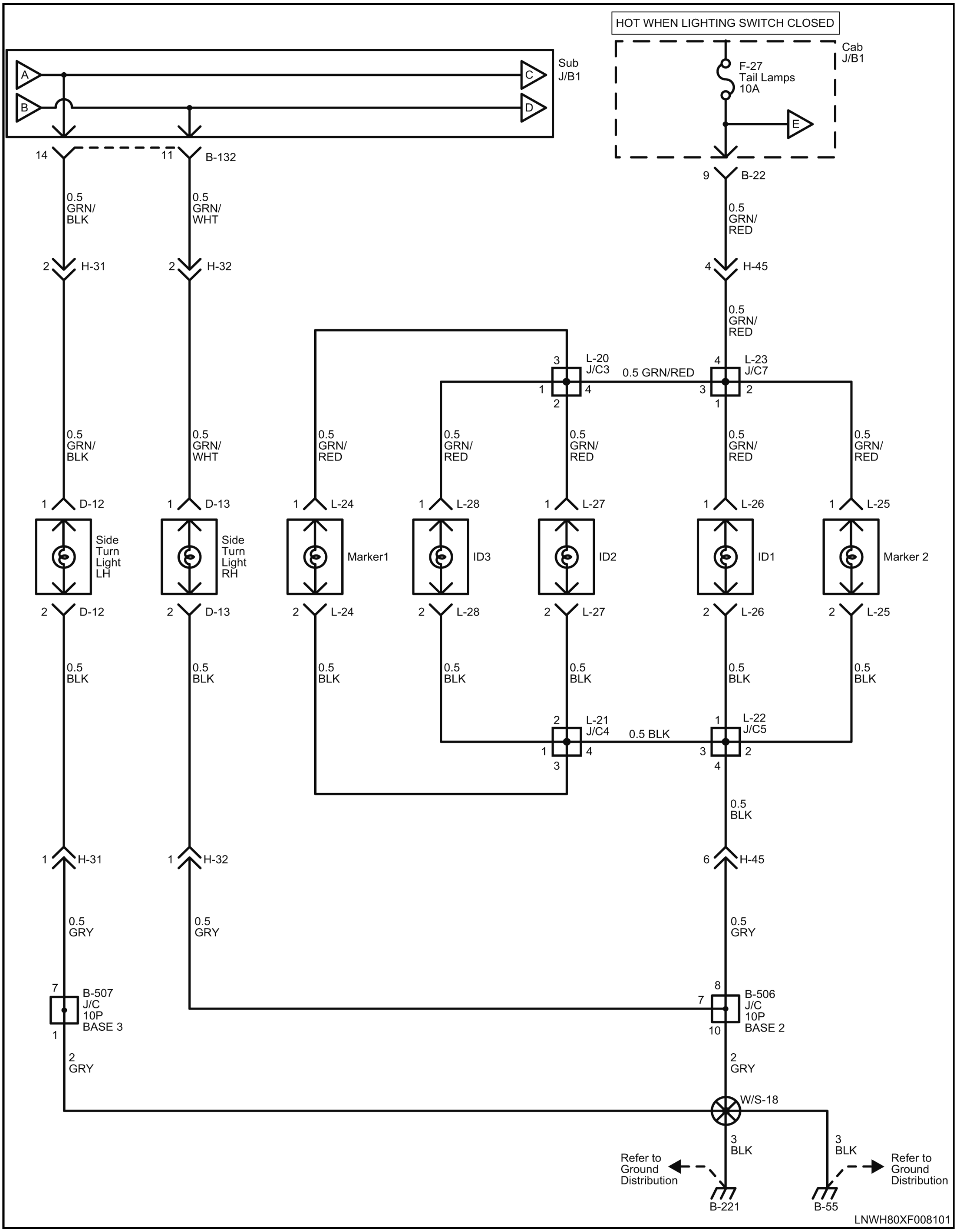
4496375


HOT IN ON
F-20
ECM
10A
Headlight High Relay
Headlight Low Relay
Tail Relay
Cab J/B1
1
7
6 B-18
22 B-22
8 B-17
1 B-23
21 B-22
Engine Control Module (ECM)
Switch Signal
Switch Signal
14
81 J-14
0.5 VIO
0.5 BLU
DRL Control Unit
0.5 RED/ WHT
0.5 VIO/ WHT
0.5 LT BLU
DRL Control Unit
2 B-39
Diode1
1 B-39
0.5 PNK/ BLU
0.5 GRY
16 B-135
4 B-131
12 B-133
Sub J/B1
3
15 H-80
18
5 B-131
0.5 BLU
Cornering Light Relay
0.5 LT GRN
0.5 BRN
0.5 VIO
0.5 BLU
0.5 YEL
0.5 VIO
0.5 LT BLU
5
6
4
16
13
18
14 B-35
Combination Switch
Resume
Accel
E
HU
HL
H'
Lo
Hi
Pass
E
T
H
Off
Tail
Head
15 B-35
0.5 GRY
2
B-507 J/C 10P BASE 3
1
2 GRY
W/S-18
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
LNWG80XF003401

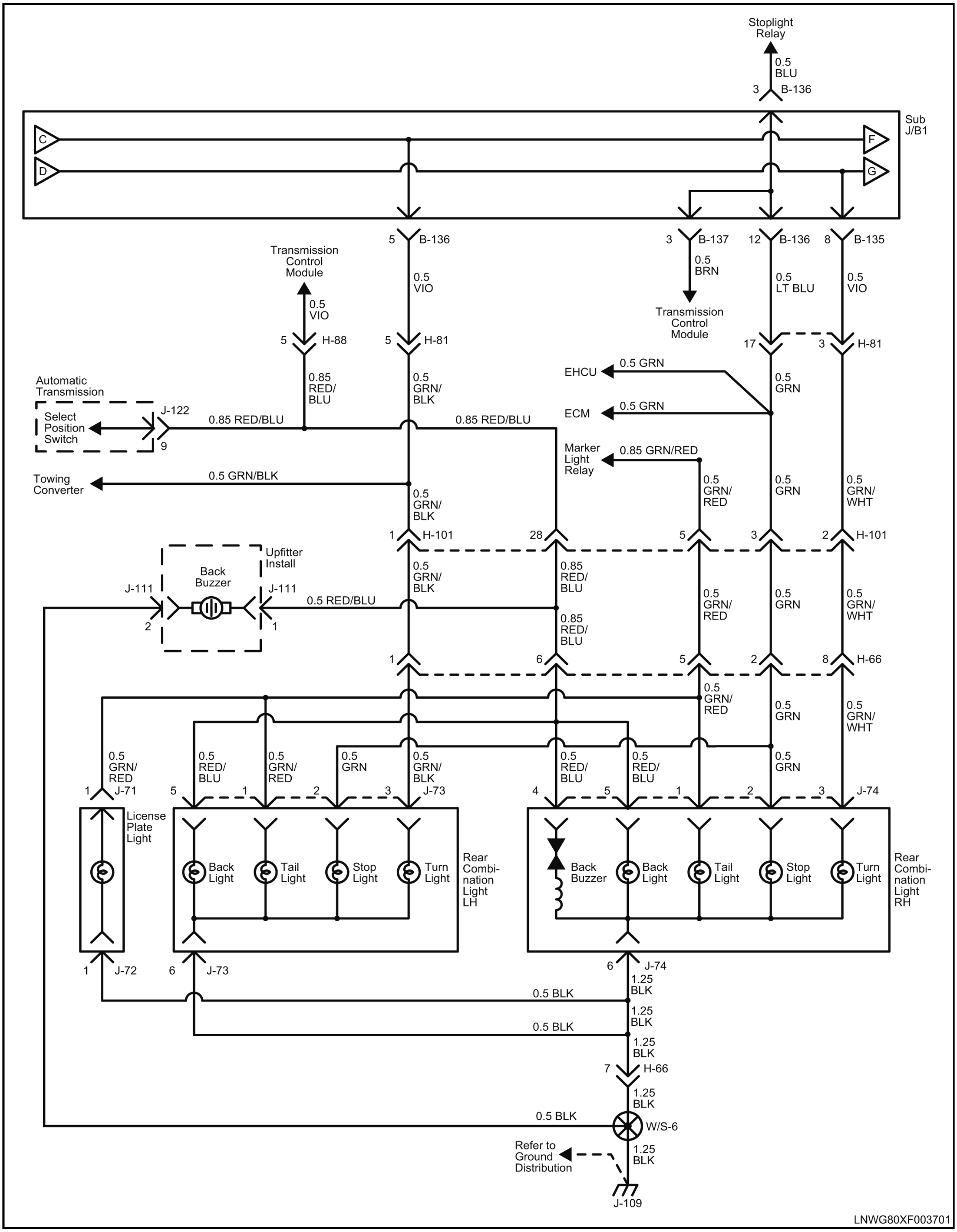
4496378


HOT AT ALL TIMES
HOT IN ON
HOT WHEN LIGHTING SWITCH CLOSED
Cab J/B1
F-26 Turn, Hazard 15A
F-21 Meter 10A
F-29 Cornering Lamps 10A
F-28 Illuminations 10A
5 B-18
4 B-21
3 B-20
Diode1
11
10 B-18
0.5 BLU
0.5 VIO
5
1 B-246
0.85 RED
0.5 LT BLU
0.5 LT GRN
17 H-84
Cornering Light Relay
0.5 LT GRN
3
2 B-246
0.5 LT BLU
0.5 BRN
0.85 LT GRN/ RED
4
1 B-216
5 B-132
4
16 B-138
14 B-131
Flasher Unit
B-216
0.5 BRN
B-131
3
1
0.5 LT GRN
2
11
Sub J/B1
A
B
7
6
5
8 B-216
17 B-134
14 B-133
5 B-134
3 B-131
3 B-135
0.5 GRY
0.5 BLU
0.5 YEL
0.5 LT BLU
0.5 LT GRN
0.5 BLK/ RED
0.5 LT BLU
0.5 LT BLU
0.5 LT GRN
2 H-92
3 H-87
0.5 VIO
3
12 B-132
Sub J/B1
0.5 BLK/ RED
0.5 BLK/ RED
1 D-2
1 D-3
Illumination Control Switch
8
3 B-170
4 B-135
Sub J/B1
Front Cornering Light LH
Front Cornering Light RH
Hazard Switch
13 B-135
3 B-133
0.5 YEL
Keyless Entry Control Unit
2 D-2
2 D-3
0.5 GRN/ BLK
0.5 GRN/ WHT
5 H-31
5 H-32
7
4 B-170
0.5 GRY
0.5 GRN
0.5 GRN/ WHT
0.5 GRY
3
2
12
11 B-35
Combination Switch
TR
TL
Turn Light Switch
L
R
Cornering Switch
B
E
HZ
1
10 B-35
0.5 GRY
0.5 GRY
5
B-506 J/C 10P BASE 2
10
9
8
5
1
B-507 J/C 10P BASE 3
2 GRY
2 GRY
W/S-18
Refer to Ground Distribution
3 BLK
3 BLK
Refer to Ground Distribution
B-221
B-55
LNWH80XF011901

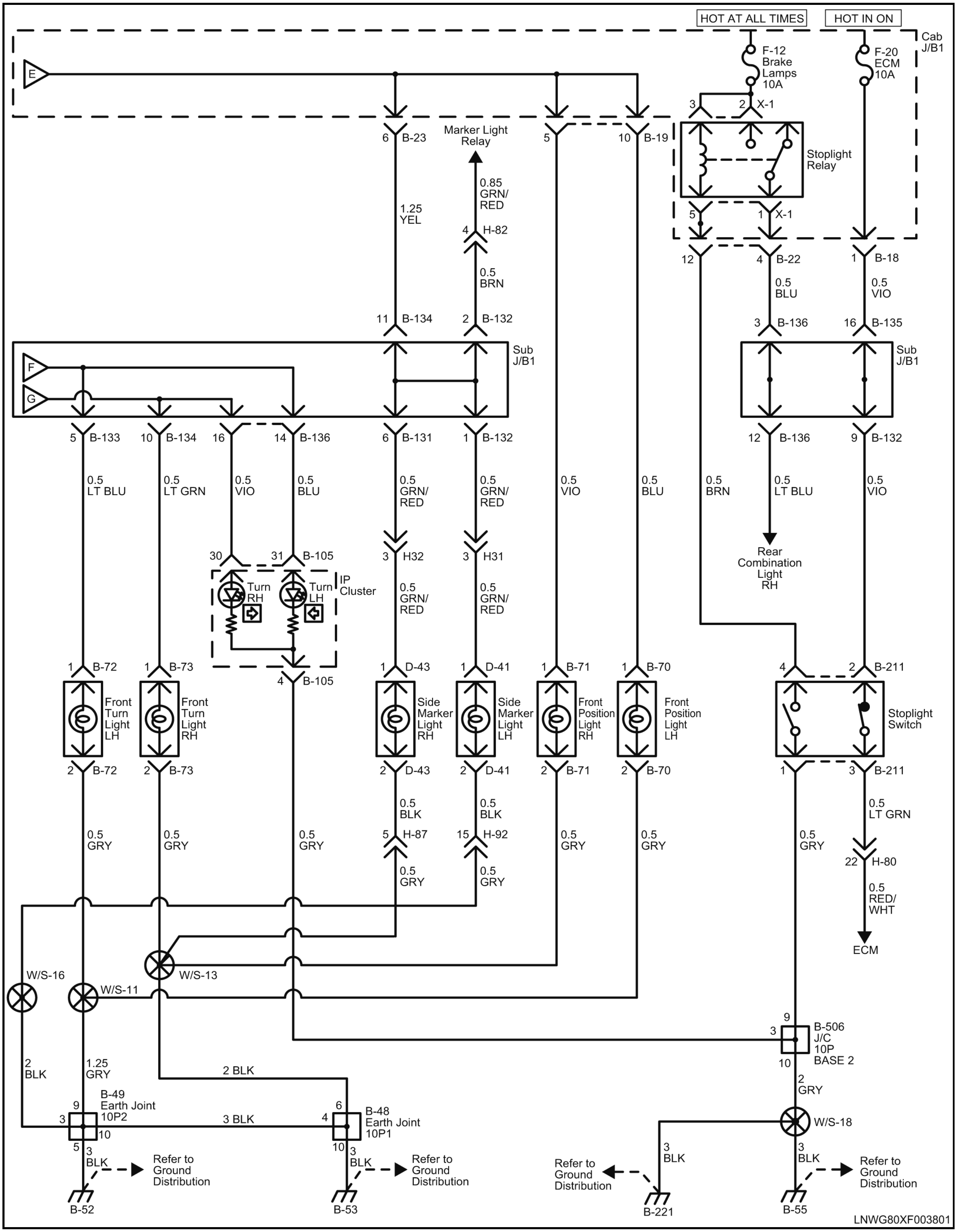
4645356


HOT WHEN LIGHTING SWITCH CLOSED
Sub J/B1
A
B
C
D
Cab J/B1
F-27 Tail Lamps 10A
E
14
11
B-132
9
B-22
0.5 GRN/BLK
0.5 GRN/WHT
0.5 GRN/RED
2 H-31
2 H-32
4 H-45
3 L-20 J/C3
0.5 GRN/RED
4 L-23 J/C7
1
4
2
3
2
1
1 D-12
1 D-13
1 L-24
1 L-28
1 L-27
1 L-26
1 L-25
Side Turn Light LH
Side Turn Light RH
Marker1
ID3
ID2
ID1
Marker 2
2 D-12
2 D-13
2 L-24
2 L-28
2 L-27
2 L-26
2 L-25
0.5 BLK
2 L-21 J/C4
0.5 BLK
1 L-22 J/C5
1
4
3
3
2
4
1 H-31
1 H-32
6 H-45
0.5 GRY
7 B-507 J/C 10P BASE 3
1
8 B-506 J/C 10P BASE 2
7
10
2 GRY
W/S-18
3 BLK
Refer to Ground Distribution
B-221
B-55
LNWH80XF008101

4645361


Stoplight Relay
0.5 BLU
3 B-136
Sub J/B1
C
D
F
G
5 B-136
3 B-137
12 B-136
8 B-135
Transmission Control Module
0.5 VIO
0.5 VIO
0.5 BRN
Transmission Control Module
0.5 LT BLU
0.5 VIO
5 H-88
5 H-81
17
3 H-81
EHCU
0.5 GRN
0.5 GRN
ECM
0.5 GRN
Automatic Transmission
Select Position Switch
J-122
9
0.85 RED/BLU
0.85 RED/BLU
0.85 RED/BLU
0.5 GRN/BLK
Marker Light Relay
0.85 GRN/RED
Towing Converter
0.5 GRN/BLK
0.5 GRN/BLK
0.5 GRN/RED
0.5 GRN
0.5 GRN/WHT
1 H-101
28
5
3
2 H-101
Upfitter Install
Back Buzzer
J-111
J-111
2
1
0.5 RED/BLU
0.5 GRN/BLK
0.85 RED/BLU
0.85 RED/BLU
0.5 GRN/RED
0.5 GRN
0.5 GRN/WHT
1
6
5
2
8 H-66
0.5 GRN/RED
0.5 GRN
0.5 GRN/WHT
0.5 GRN/RED
0.5 RED/BLU
0.5 GRN/RED
0.5 GRN
0.5 GRN/BLK
0.5 RED/BLU
0.5 RED/BLU
0.5 GRN
1 J-71
5
1
2
3 J-73
4
5
1
2
3 J-74
License Plate Light
Back Light
Tail Light
Stop Light
Turn Light
Rear Combination Light LH
Back Buzzer
Back Light
Tail Light
Stop Light
Turn Light
Rear Combination Light RH
1 J-72
6 J-73
6 J-74
1.25 BLK
0.5 BLK
1.25 BLK
0.5 BLK
1.25 BLK
7 H-66
1.25 BLK
0.5 BLK
W/S-6
Refer to Ground Distribution
1.25 BLK
J-109
LNWG80XF003701

4496392


HOT AT ALL TIMES
HOT IN ON
Cab J/B1
E
F-12 Brake Lamps 10A
F-20 ECM 10A
3
2 X-1
6 B-23
Marker Light Relay
5
10 B-19
Stoplight Relay
0.85 GRN/ RED
1.25 YEL
4 H-82
5
1 X-1
12
4 B-22
1 B-18
0.5 BRN
0.5 BLU
0.5 VIO
11 B-134
2 B-132
3 B-136
16 B-135
Sub J/B1
F
G
Sub J/B1
5 B-133
10 B-134
16
14 B-136
6 B-131
1 B-132
12 B-136
9 B-132
0.5 LT BLU
0.5 LT GRN
0.5 VIO
0.5 BLU
0.5 GRN/ RED
0.5 GRN/ RED
0.5 VIO
0.5 BLU
0.5 BRN
0.5 LT BLU
0.5 VIO
Rear Combination Light RH
30
31 B-105
Turn RH
Turn LH
IP Cluster
3 H32
3 H31
0.5 GRN/ RED
0.5 GRN/ RED
4 B-105
1 B-72
1 B-73
1 D-43
1 D-41
1 B-71
1 B-70
4
2 B-211
Front Turn Light LH
Front Turn Light RH
Side Marker Light RH
Side Marker Light LH
Front Position Light RH
Front Position Light LH
Stoplight Switch
2 B-72
2 B-73
2 D-43
2 D-41
2 B-71
2 B-70
1
3 B-211
0.5 BLK
0.5 BLK
0.5 LT GRN
0.5 GRY
0.5 GRY
0.5 GRY
5 H-87
15 H-92
0.5 GRY
0.5 GRY
0.5 GRY
0.5 GRY
22 H-80
0.5 GRY
0.5 GRY
0.5 RED/ WHT
ECM
W/S-13
W/S-16
W/S-11
9
3
B-506 J/C 10P BASE 2
10
2 BLK
1.25 GRY
2 BLK
2 GRY
B-49 Earth Joint 10P2
9
3
10
3 BLK
6
4
B-48 Earth Joint 10P1
W/S-18
5
3 BLK
Refer to Ground Distribution
10
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
3 BLK
3 BLK
Refer to Ground Distribution
B-52
B-53
B-221
B-55
LNWG80XF003801

4496394

Description and Operation

Interior Lights Circuit Description

The circuit consists of the dome light, dome light switch, door switch.

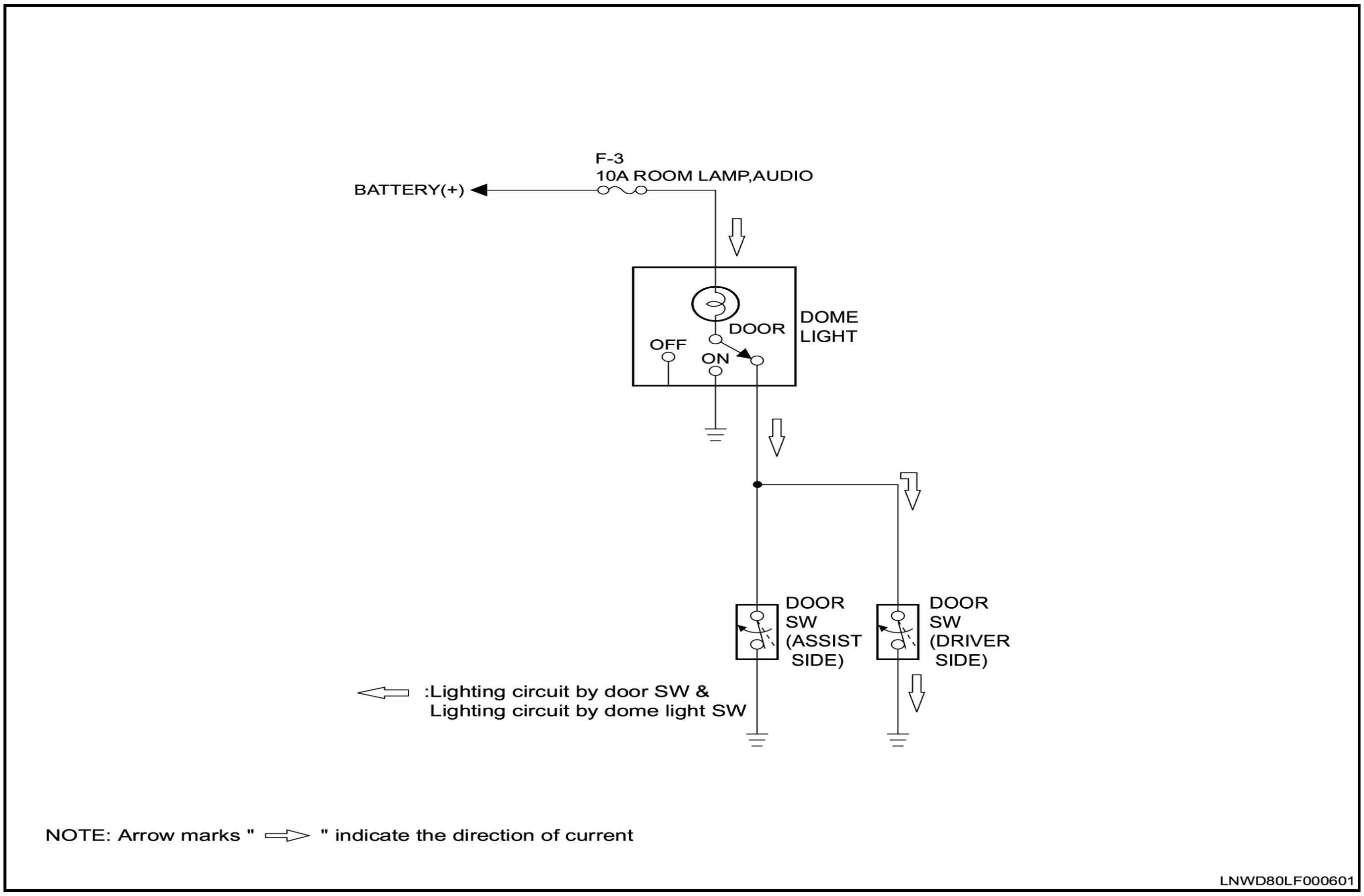
The dome light lights up when the door is opened with the switch set at the door mode. It can be lit by operating ON or OFF of the dome light switch.

The dome light can be lit by respective switch independent of the position of the ignition switch.

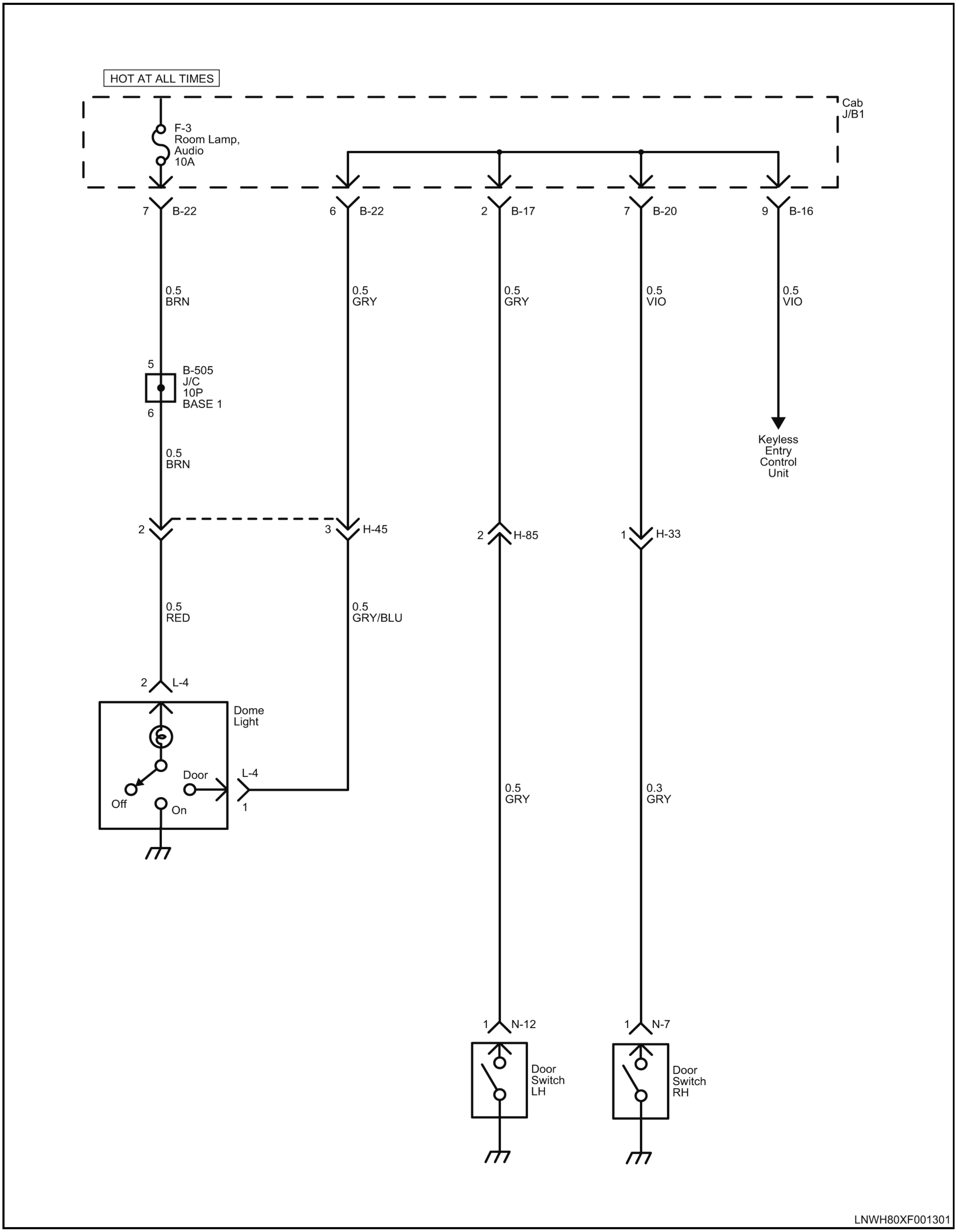
By operating the dome light switch fitted on the instrument panel, the dome light can be lit independent of the switch position of dome light.

Schematic and Routing Diagrams

Interior Lights Schematics


F-3
10A ROOM LAMP,AUDIO
BATTERY(+)
DOME LIGHT
DOOR
OFF
ON
DOOR SW (ASSIST SIDE)
DOOR SW (DRIVER SIDE)
:Lighting circuit by door SW & Lighting circuit by dome light SW
NOTE: Arrow marks " ⇨ " indicate the direction of current
LNWD80LF000601

4496539


HOT AT ALL TIMES
Cab J/B1
F-3 Room Lamp, Audio 10A
7 B-22
6 B-22
2 B-17
7 B-20
9 B-16
0.5 BRN
0.5 GRY
0.5 GRY
0.5 VIO
0.5 VIO
5
B-505 J/C 10P BASE 1
6
Keyless Entry Control Unit
0.5 BRN
2
3 H-45
2 H-85
1 H-33
0.5 RED
0.5 GRY/BLU
2 L-4
Dome Light
Door
L-4
1
Off
On
0.5 GRY
0.3 GRY
1 N-12
1 N-7
Door Switch LH
Door Switch RH
LNWH80XF001301

4645365

Description and Operation

Wiper/Washer System Circuit Description

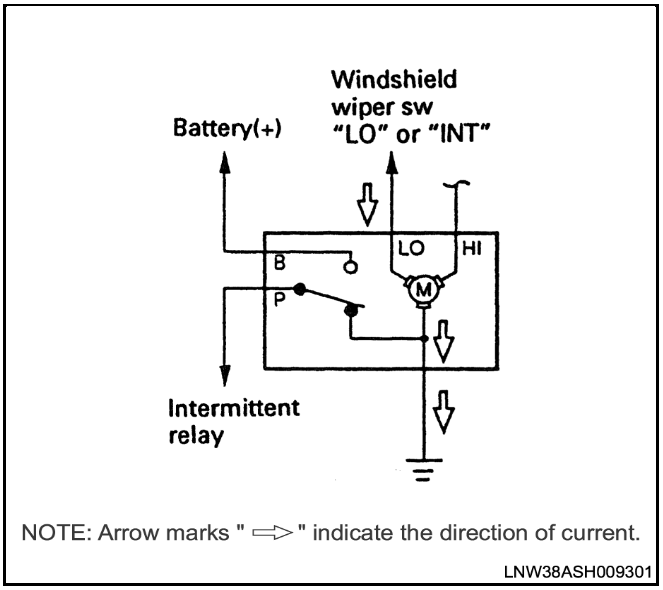
The circuit consists of the ignition switch, windshield wiper and washer switch, wiper motor, washer motor the intermittent relay horn switch and horn.

When the wiper and washer switch is turned on with starter switch on, the battery voltage is applied to the wiper motor to activate the wiper.

The washer motor squirts glass cleaning fluid while the washer switch is being pushed. The intermittent relay is used to control motion of the wiper.

Operation of Windshield Wiper Motor (When Wiper "LO" or "INT" Position)

1. Condition of wiper switch is "LO" or "INT" position (Wiper motor is starting to operate)

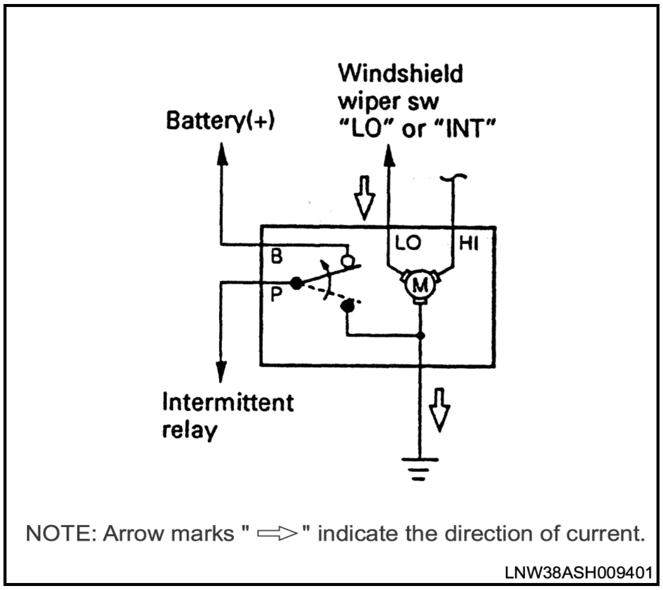

Windshield
wiper sw
"LO" or "INT"
Battery(+)
B
P
LO
HI
M
Intermittent
relay

NOTE: Arrow marks " ⇨ " indicate the direction of current.

LNW38ASH009301

4496571

2. Condition of wiper motor is operating

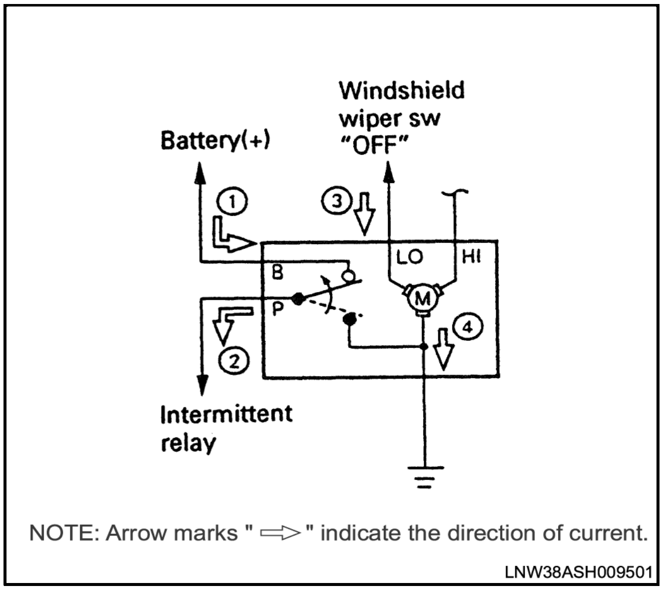

Windshield
wiper sw
"LO" or "INT"
Battery(+)
B
P
LO
HI
M
Intermittent
relay

NOTE: Arrow marks " ⇨ " indicate the direction of current.

LNW38ASH009401

4496576

3. Condition of wiper switch is just "OFF" (Wiper motor is still operating until auto-stop position)

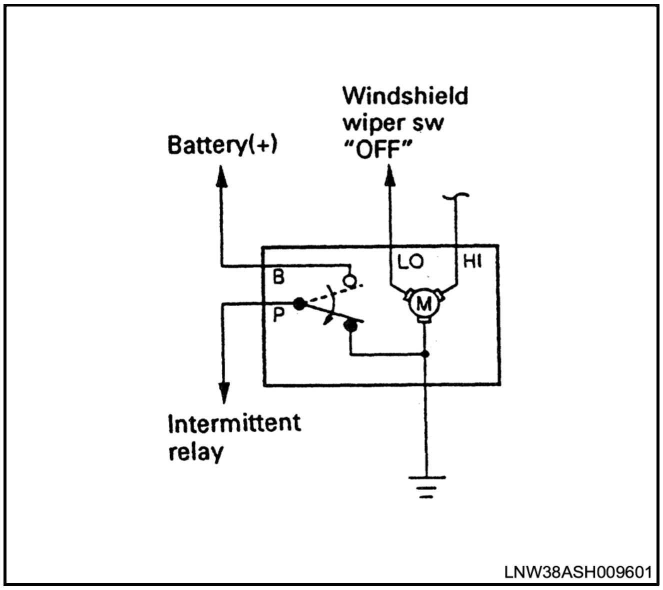

Windshield
wiper sw
"OFF"
Battery(+)
①
③
B
P
LO
HI
M
④
②
Intermittent
relay

NOTE: Arrow marks " ⇨ " indicate the direction of current.

LNW38ASH009501

4496574

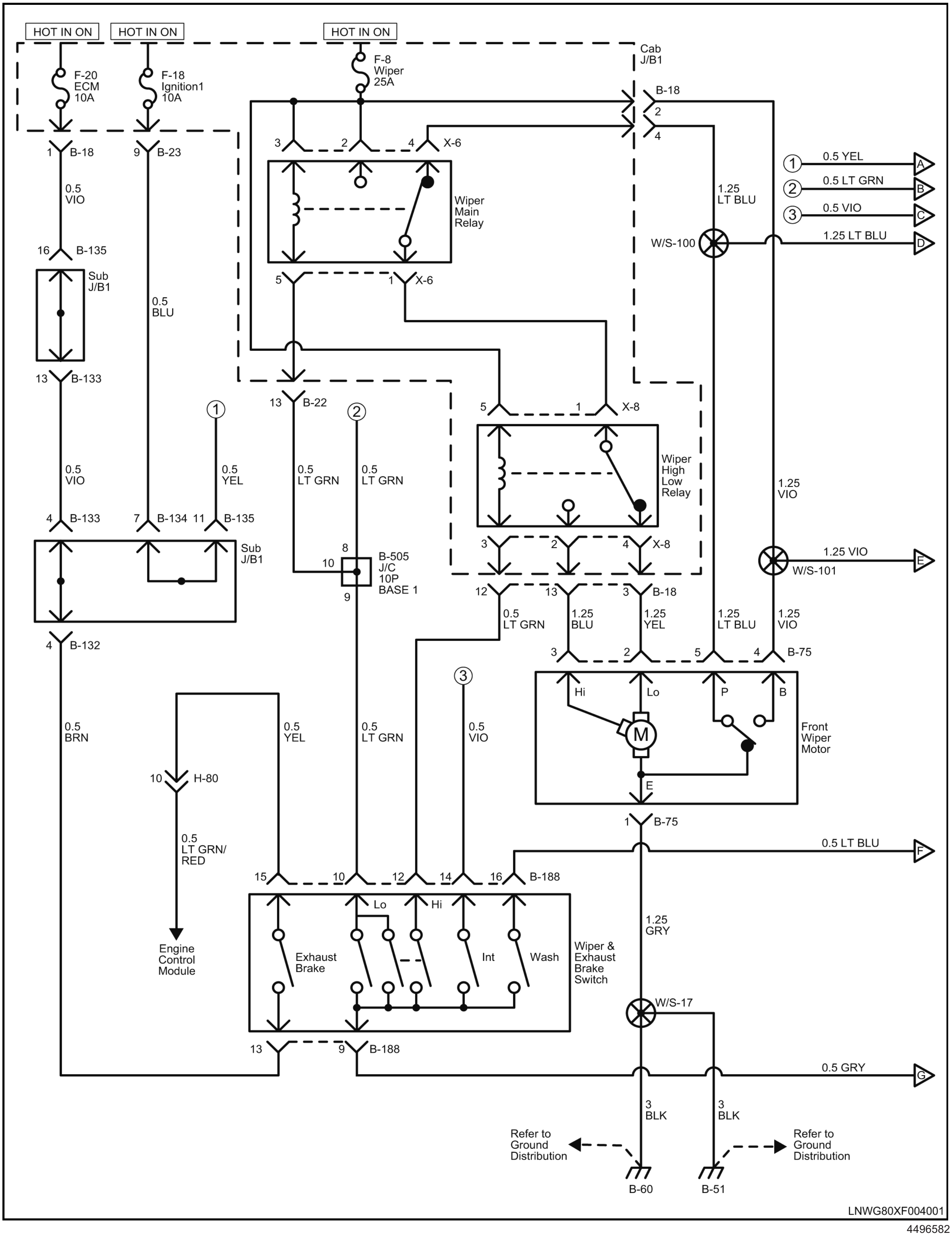
4. Wiper motor stops at auto-stop position

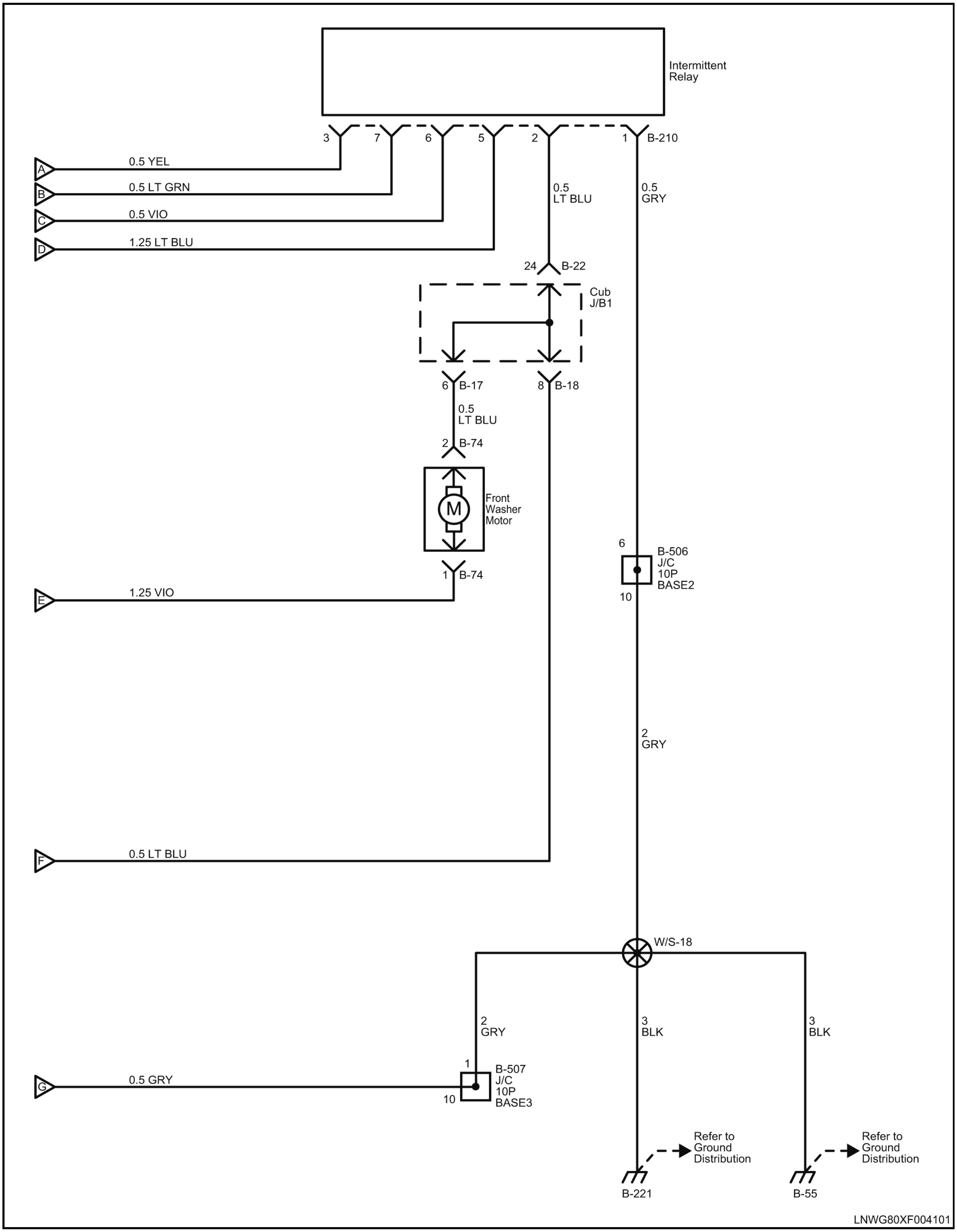

Windshield
wiper sw
"OFF"
Battery(+)
LO
HI
B
P
M
Intermittent
relay
LNW38ASH009601

4496578

Schematic and Routing Diagrams

Wiper/Washer Schematics


HOT IN ON
HOT IN ON
HOT IN ON
F-20
ECM
10A
F-18
Ignition1
10A
F-8
Wiper
25A
Cab
J/B1
B-18
2
4
1 B-18
9 B-23
3
2
4 X-6
Wiper
Main
Relay
5
1 X-6
0.5
VIO
16 B-135
Sub
J/B1
0.5
BLU
13 B-133
13 B-22
1
2
0.5
VIO
0.5
YEL
0.5
LT GRN
0.5
LT GRN
4 B-133
7 B-134 11 B-135
Sub
J/B1
8
10
9
B-505
J/C
10P
BASE 1
4 B-132
0.5
BRN
5
1 X-8
Wiper
High
Low
Relay
3
2
4 X-8
12
13
3 B-18
0.5
LT GRN
1.25
BLU
1.25
YEL
1.25
LT BLU
1.25
VIO
3
2
5
4 B-75
Hi
Lo
P
B
M
E
Front
Wiper
Motor
1 B-75
1
0.5 YEL
A
2
0.5 LT GRN
B
3
0.5 VIO
C
1.25 LT BLU
D
W/S-100
1.25
LT BLU
1.25
VIO
1.25 VIO
E
W/S-101
3
0.5
YEL
0.5
LT GRN
0.5
VIO
10 H-80
0.5
LT GRN/
RED
Engine
Control
Module
0.5 LT BLU
F
15
10
12
14
16 B-188
Lo
Hi
Exhaust
Brake
Int
Wash
Wiper &
Exhaust
Brake
Switch
1.25
GRY
W/S-17
13
9 B-188
0.5 GRY
G
3
BLK
3
BLK
Refer to
Ground
Distribution
Refer to
Ground
Distribution
B-60
B-51
LNWG80XF004001
4496582


Intermittent Relay
3
7
6
5
2
1
B-210
A
0.5 YEL
B
0.5 LT GRN
C
0.5 VIO
D
1.25 LT BLU
0.5 LT BLU
0.5 GRY
24
B-22
Cub J/B1
6
B-17
8
B-18
0.5 LT BLU
2
B-74
Front Washer Motor
M
1
B-74
E
1.25 VIO
6
B-506 J/C 10P BASE2
10
2 GRY
F
0.5 LT BLU
W/S-18
2 GRY
3 BLK
3 BLK
1
B-507 J/C 10P BASE3
10
G
0.5 GRY
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
LNWG80XF004101

4496584

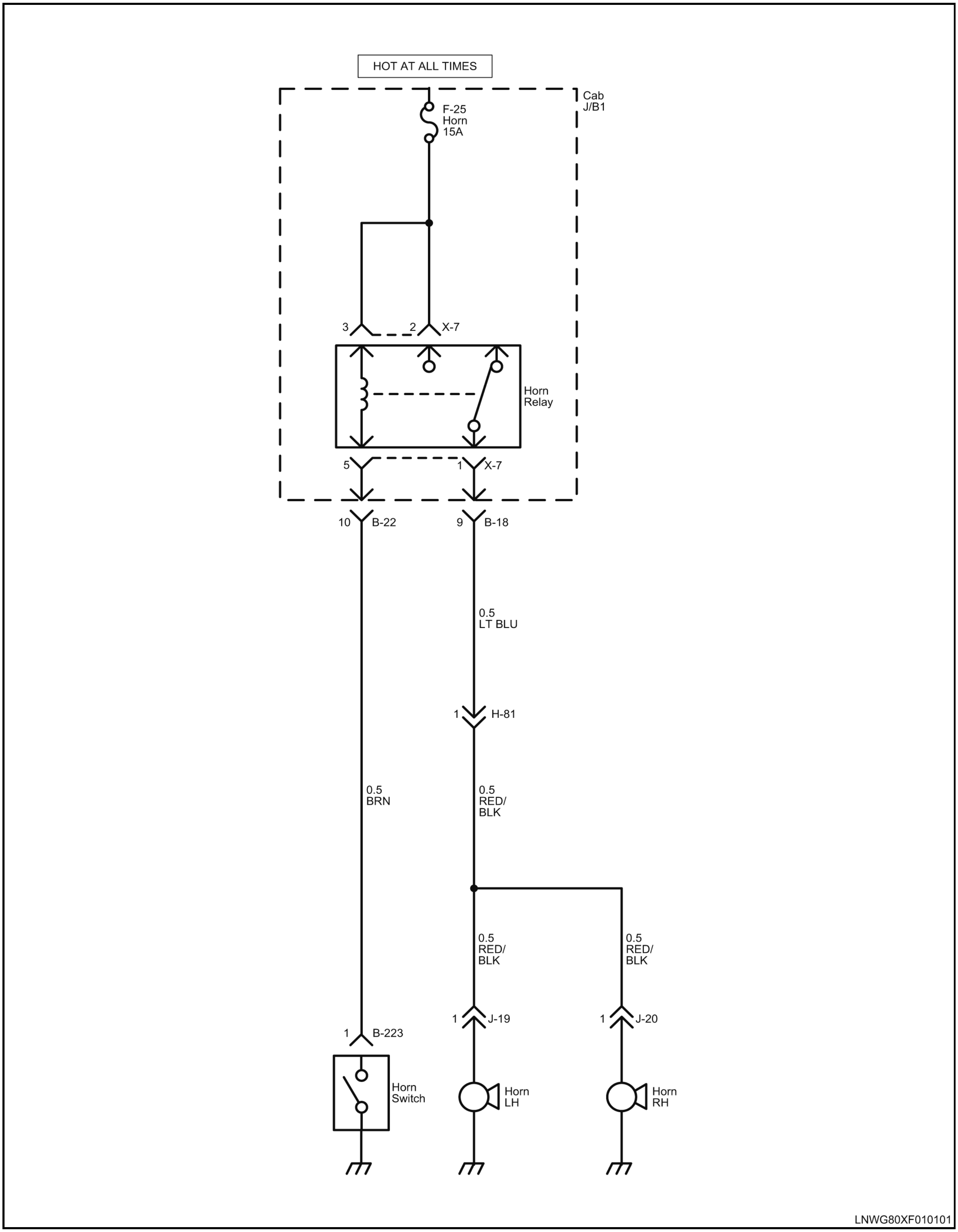
Description and Operation

Horns Circuit Description

The circuit consists of the horns, the horn switch and the relay. Horn operation is not dependent upon starter switch position. Pressing the horn pad (horn switch) activates the relay and causes the horns to sound.

Schematic and Routing Diagrams

Horn Schematics


HOT AT ALL TIMES
Cab
J/B1
F-25
Horn
15A
3
2
X-7
Horn
Relay
5
1
X-7
10
B-22
9
B-18
0.5
LT BLU
1
H-81
0.5
BRN
0.5
RED/
BLK
0.5
RED/
BLK
0.5
RED/
BLK
1
J-19
1
J-20
1
B-223
Horn
Switch
Horn
LH
Horn
RH
LNWG80XF010101

4496653

Description and Operation

Radio and Cigarette Lighter Circuit Description

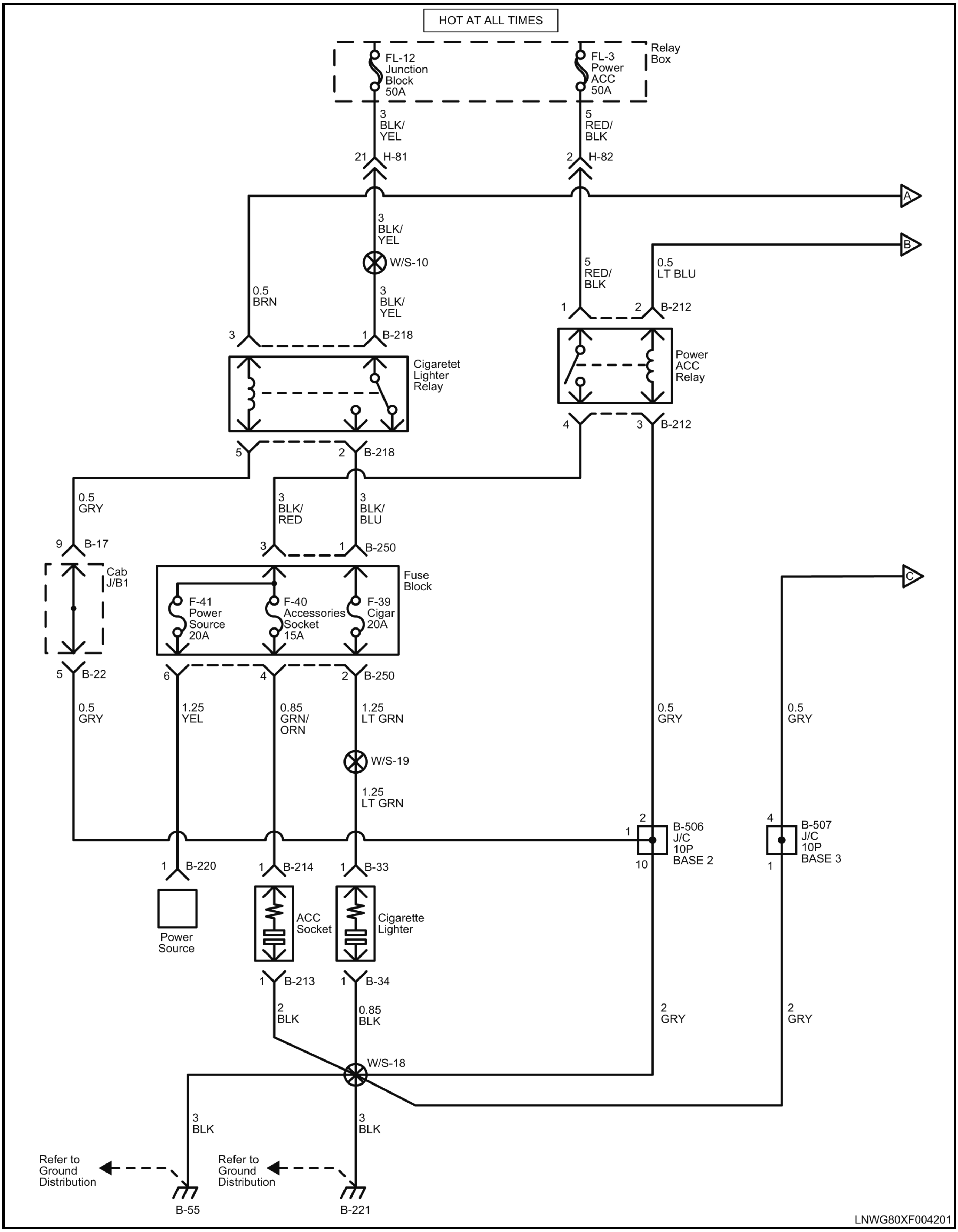
The circuit consists of the ignition switch, audio, cigarette lighter and the relay.

The audio circuit is designed for the current to flow through the receiver circuit when the audio switch is turned on with the ignition switch in “ACC” or “ON”. Current runs through the memory circuit of the audio regardless of the position of the ignition switch.

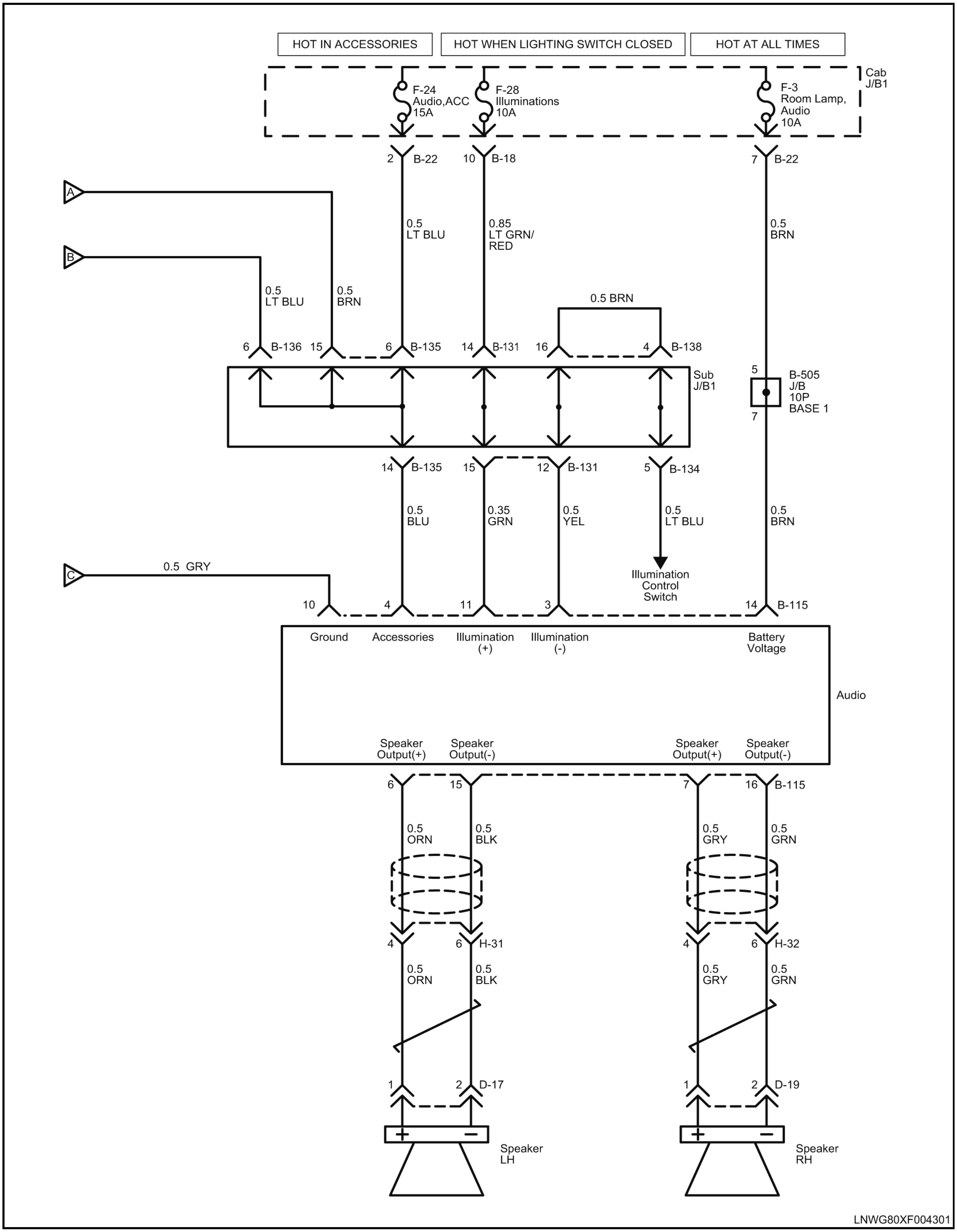
When the cigarette lighter is pushed in with the ignition switch at either “ACC” or “ON” position, a circuit is formed in the cigarette lighter case to heat the lighter coil. The cigarette lighter is spring back to its original position after the lighter coil is heated.

Schematic and Routing Diagrams

Radio and Cigarette Lighter Schematics


HOT AT ALL TIMES
FL-12 Junction Block 50A
FL-3 Power ACC 50A
Relay Box
3 BLK/ YEL
5 RED/ BLK
21 H-81
2 H-82
A
B
C
3 BLK/ YEL
W/S-10
3 BLK/ YEL
0.5 BRN
5 RED/ BLK
0.5 LT BLU
1 2 B-212
3 1 B-218
Cigaretet Lighter Relay
Power ACC Relay
4 3 B-212
5 2 B-218
0.5 GRY
3 BLK/ RED
3 BLK/ BLU
9 B-17
3 1 B-250
Cab J/B1
Fuse Block
F-41 Power Source 20A
F-40 Accessories Socket 15A
F-39 Cigar 20A
5 B-22
6 4 2 B-250
0.5 GRY
1.25 YEL
0.85 GRN/ ORN
1.25 LT GRN
W/S-19
1.25 LT GRN
0.5 GRY
0.5 GRY
2 1 B-506 J/C 10P BASE 2 10
4 B-507 J/C 10P BASE 3 1
1 B-220
1 B-214
1 B-33
Power Source
ACC Socket
Cigarette Lighter
1 B-213
1 B-34
2 BLK
0.85 BLK
2 GRY
2 GRY
W/S-18
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
B-55
B-221
LNWG80XF004201

4496667


HOT IN ACCESSORIES
HOT WHEN LIGHTING SWITCH CLOSED
HOT AT ALL TIMES
Cab J/B1
F-24 Audio,ACC 15A
F-28 Illuminations 10A
F-3 Room Lamp, Audio 10A
2 B-22
10 B-18
7 B-22
A
B
C
0.5 LT BLU
0.85 LT GRN/ RED
0.5 BRN
0.5 LT BLU
0.5 BRN
0.5 BRN
6 B-136 15
6 B-135
14 B-131
16
4 B-138
Sub J/B1
5
B-505 J/B 10P BASE 1
7
14 B-135
15
12 B-131
5 B-134
0.5 BLU
0.35 GRN
0.5 YEL
0.5 LT BLU
0.5 BRN
Illumination Control Switch
0.5 GRY
10
4
11
3
14 B-115
Ground
Accessories
Illumination (+)
Illumination (-)
Battery Voltage
Audio
Speaker Output(+)
Speaker Output(-)
Speaker Output(+)
Speaker Output(-)
6
15
7
16 B-115
0.5 ORN
0.5 BLK
0.5 GRY
0.5 GRN
4
6 H-31
4
6 H-32
0.5 ORN
0.5 BLK
0.5 GRY
0.5 GRN
1
2 D-17
1
2 D-19
+
−
Speaker LH
+
−
Speaker RH
LNWG80XF004301

4496668

Description and Operation

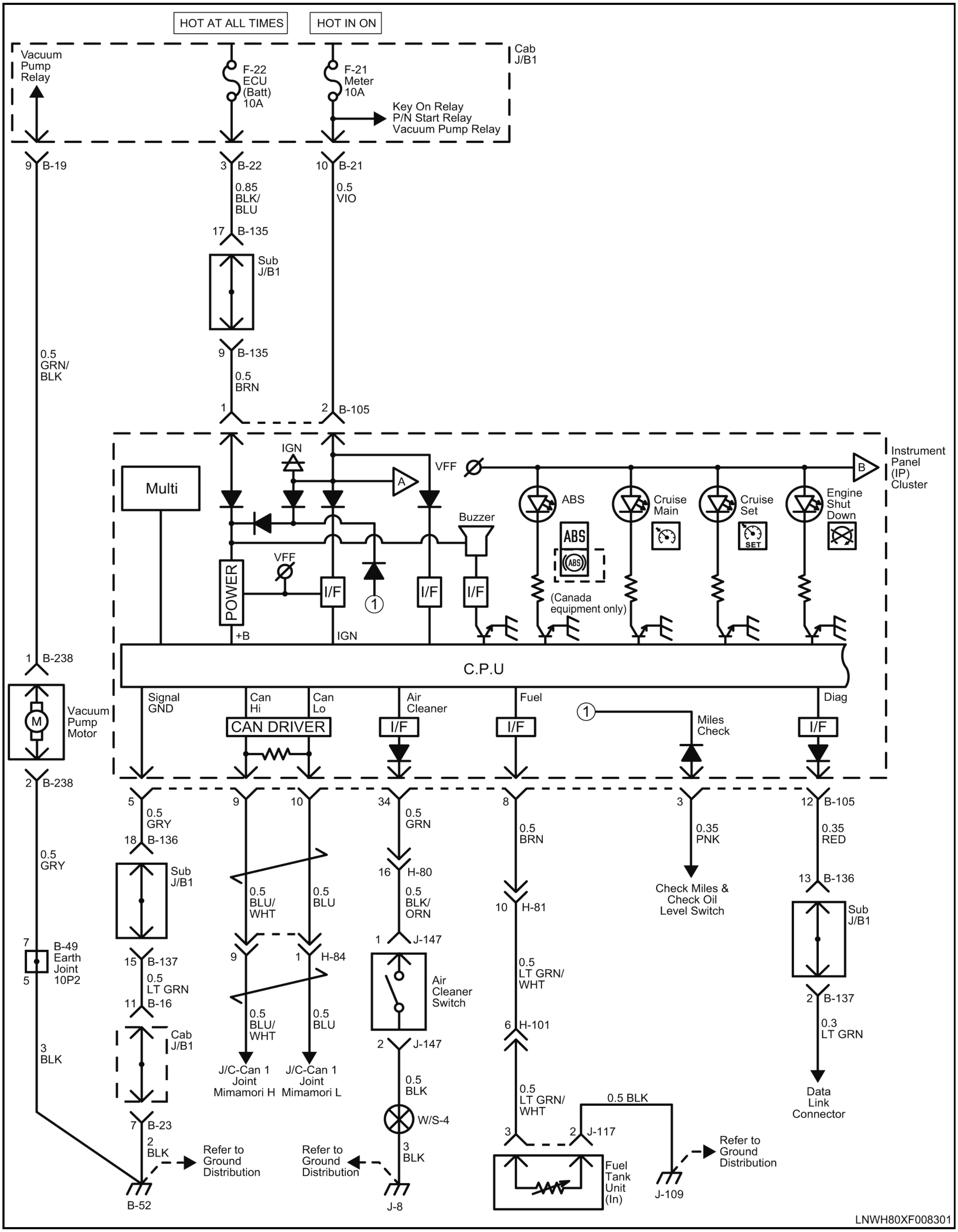
Instrument Cluster Circuit Description

The circuit consists of the ignition switch, instrument panel (IP) cluster, vacuum tank switch, oil pressure switch, brake fluid level switch, parking brake switch, vehicle speed sensor, fuel tank unit, A/T shift indicator and thermo unit.

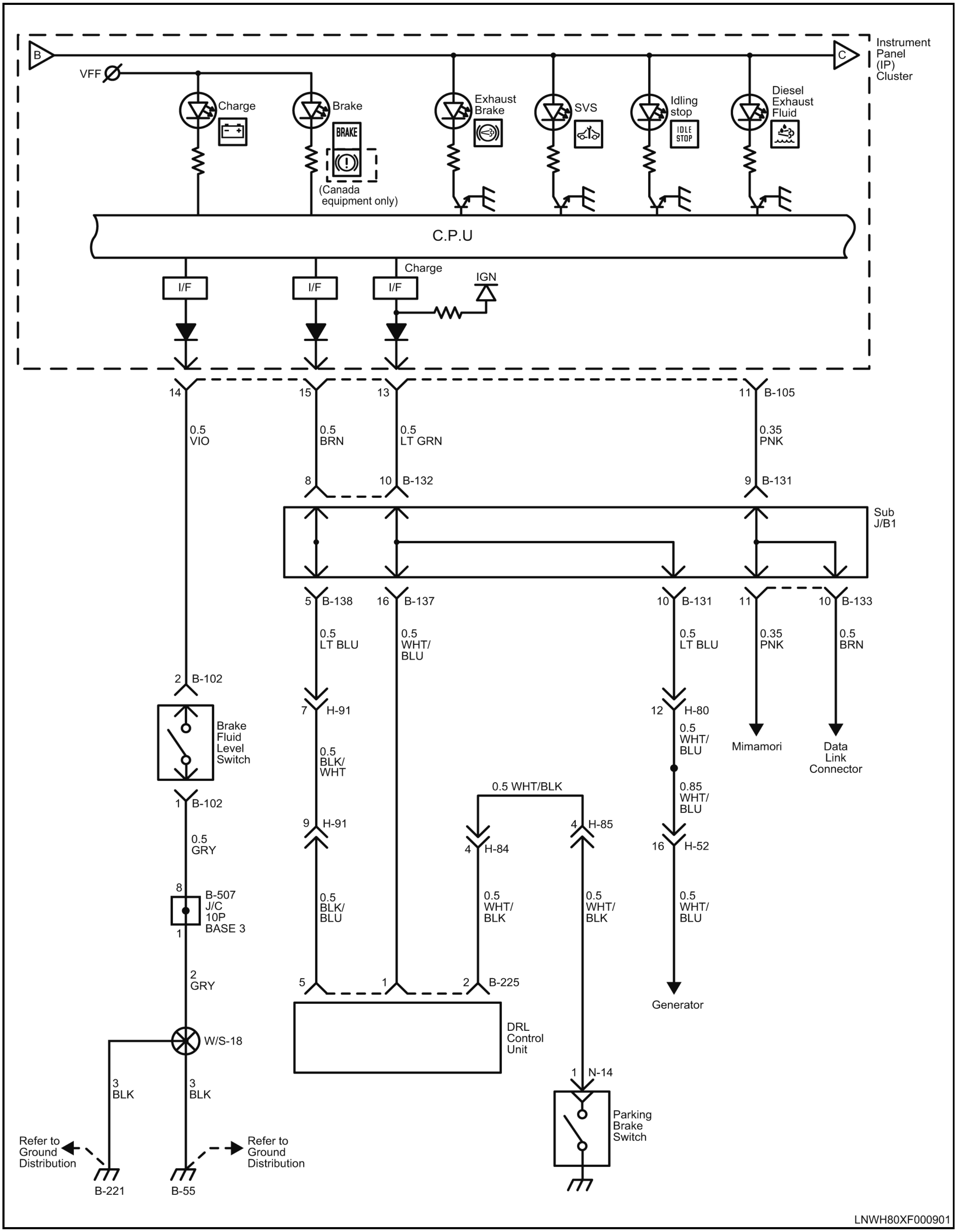
The instrument panel (IP) cluster contains the speedometer, tachometer, fuel gauge, engine coolant temperature gauge and the warning/indicator lamp.

Schematic and Routing Diagrams

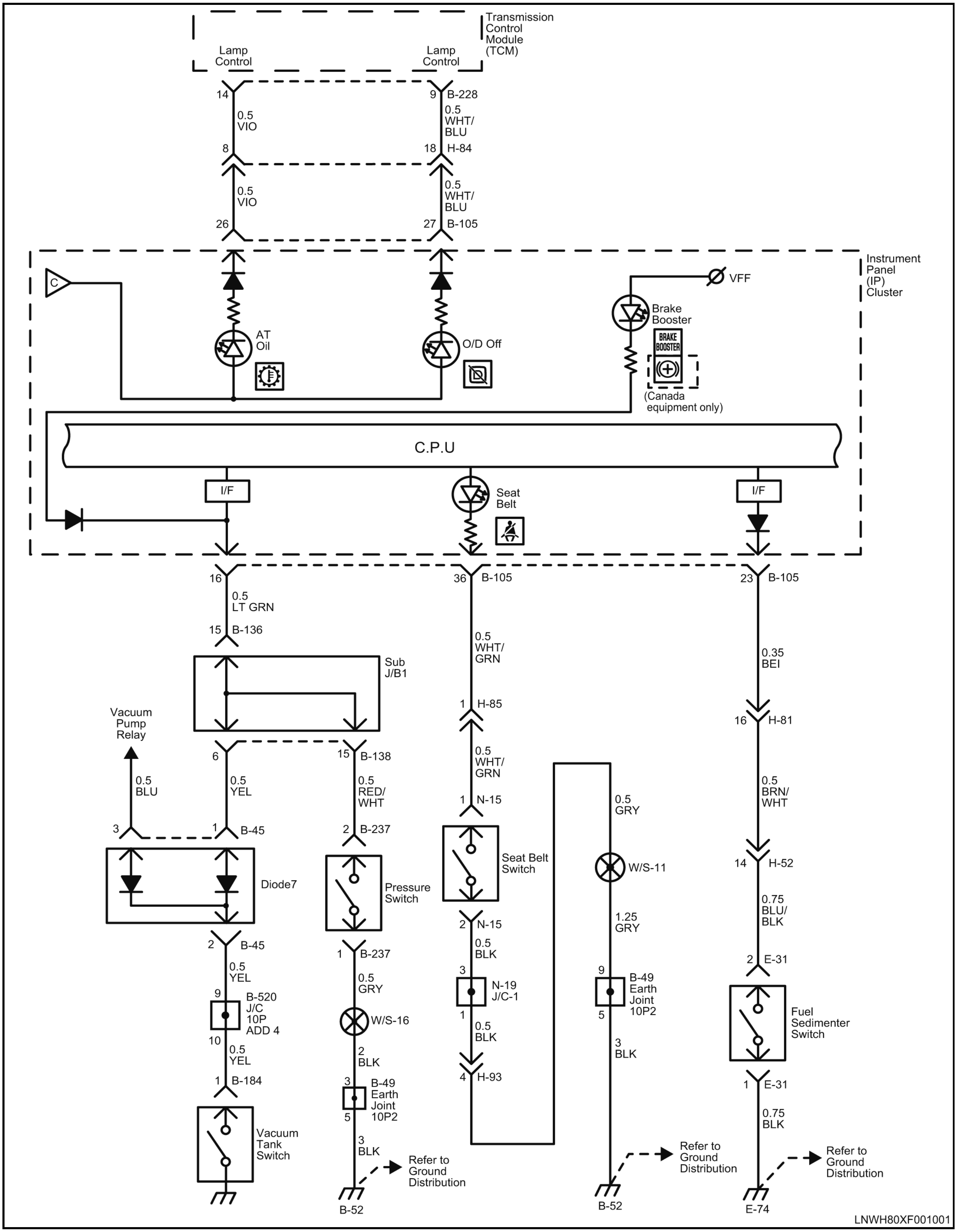
Instrument Cluster Schematics


HOT AT ALL TIMES
HOT IN ON
Vacuum Pump Relay
F-22 ECU (Batt) 10A
F-21 Meter 10A
Cab J/B1
Key On Relay
P/N Start Relay
Vacuum Pump Relay
9 B-19
3 B-22
10 B-21
0.85 BLK/ BLU
0.5 VIO
17 B-135
Sub J/B1
9 B-135
0.5 GRN/ BLK
0.5 BRN
1
2 B-105
Instrument Panel (IP) Cluster
Multi
IGN
A
VFF
B
ABS
Cruise Main
Cruise Set
Engine Shut Down
Buzzer
VFF
POWER
I/F
I/F
I/F
1
ABS
(Canada equipment only)
SET
+B
IGN
C.P.U
1 B-238
Vacuum Pump Motor
M
2 B-238
Signal GND
Can Hi
Can Lo
CAN DRIVER
Air Cleaner
I/F
Fuel
I/F
1
Miles Check
Diag
I/F
5
0.5 GRY
18 B-136
9
10
34
0.5 GRN
8
3
12 B-105
0.5 BRN
0.35 PNK
0.35 RED
0.5 GRY
Sub J/B1
0.5 BLU/ WHT
0.5 BLU
16 H-80
0.5 BLK/ ORN
10 H-81
Check Miles & Check Oil Level Switch
13 B-136
Sub J/B1
7 B-49 Earth Joint 10P2 5
15 B-137
0.5 LT GRN
11 B-16
9
1 H-84
1 J-147
Air Cleaner Switch
0.5 LT GRN/ WHT
2 B-137
0.3 LT GRN
0.5 BLU/ WHT
0.5 BLU
Cab J/B1
6 H-101
3 BLK
J/C-Can 1 Joint Mimamori H
J/C-Can 1 Joint Mimamori L
2 J-147
0.5 BLK
Data Link Connector
W/S-4
0.5 LT GRN/ WHT
0.5 BLK
7 B-23
2 BLK
Refer to Ground Distribution
Refer to Ground Distribution
3 BLK
3
2 J-117
Refer to Ground Distribution
Fuel Tank Unit (In)
B-52
J-8
J-109
LNWH80XF008301

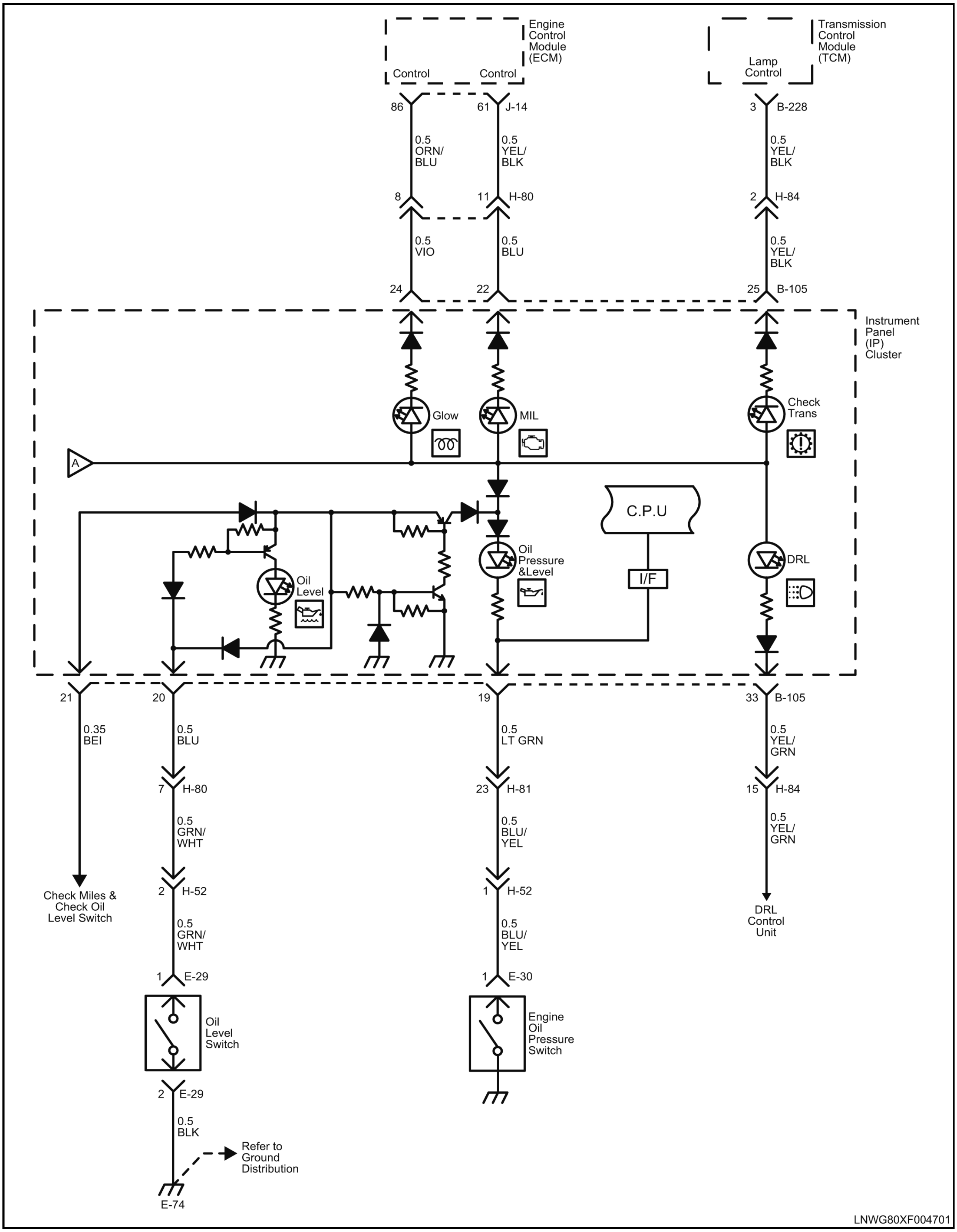
4645376


B
VFF
C
Instrument Panel (IP) Cluster
Charge
Brake
BRAKE
(Canada equipment only)
Exhaust Brake
SVS
Idling stop
IDLE STOP
Diesel Exhaust Fluid
C.P.U
I/F
I/F
Charge
I/F
IGN
14
15
13
11 B-105
0.5 VIO
0.5 BRN
0.5 LT GRN
0.35 PNK
8
10 B-132
9 B-131
Sub J/B1
5 B-138
16 B-137
10 B-131
11
10 B-133
0.5 LT BLU
0.5 WHT/ BLU
0.5 LT BLU
0.35 PNK
0.5 BRN
2 B-102
Brake Fluid Level Switch
1 B-102
0.5 GRY
7 H-91
0.5 BLK/ WHT
12 H-80
0.5 WHT/ BLU
Mimamori
Data Link Connector
0.5 WHT/BLK
0.85 WHT/ BLU
9 H-91
4 H-84
4 H-85
16 H-52
8
B-507 J/C 10P BASE 3
1
0.5 BLK/ BLU
0.5 WHT/ BLK
0.5 WHT/ BLK
0.5 WHT/ BLU
2 GRY
5
1
2 B-225
Generator
DRL Control Unit
W/S-18
1 N-14
3 BLK
3 BLK
Parking Brake Switch
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
LNWH80XF000901

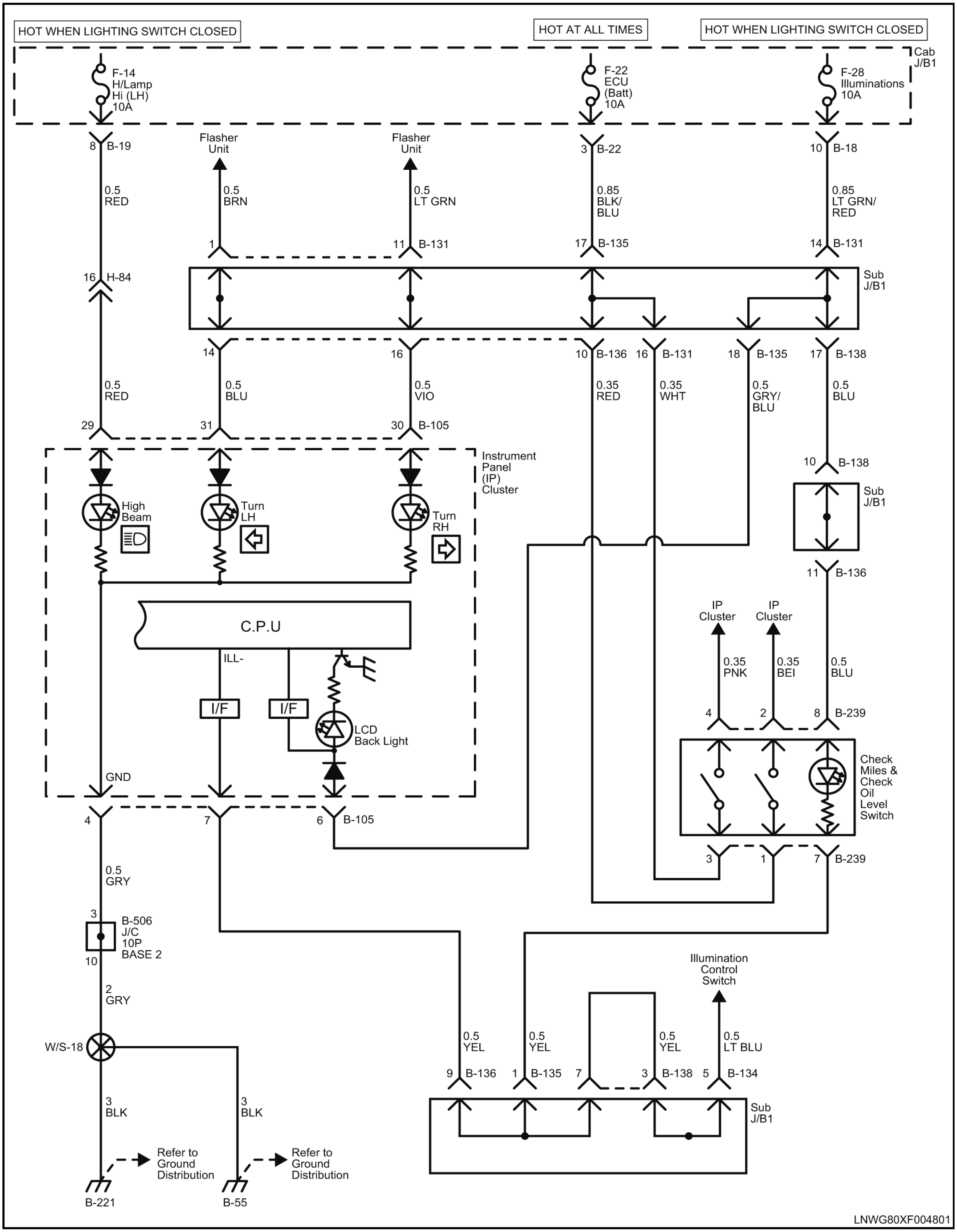
4645379


Transmission Control Module (TCM)
Lamp Control
Lamp Control
14
9
B-228
0.5 VIO
0.5 WHT/ BLU
8
18
H-84
0.5 VIO
0.5 WHT/ BLU
26
27
B-105
Instrument Panel (IP) Cluster
C
VFF
Brake Booster
BRAKE BOOSTER
AT Oil
O/D Off
(Canada equipment only)
C.P.U
I/F
Seat Belt
I/F
16
36
B-105
23
B-105
0.5 LT GRN
15
B-136
0.5 WHT/ GRN
0.35 BEI
Sub J/B1
1
H-85
16
H-81
Vacuum Pump Relay
6
15
B-138
0.5 WHT/ GRN
0.5 BLU
0.5 YEL
0.5 RED/ WHT
0.5 GRY
0.5 BRN/ WHT
1
N-15
3
1
B-45
2
B-237
Diode7
Pressure Switch
Seat Belt Switch
W/S-11
14
H-52
2
B-45
1
B-237
2
N-15
0.5 BLK
1.25 GRY
0.75 BLU/ BLK
0.5 YEL
0.5 GRY
2
E-31
9
B-520 J/C 10P ADD 4
3
N-19 J/C-1
1
9
B-49 Earth Joint 10P2
5
W/S-16
Fuel Sedimenter Switch
10
0.5 YEL
0.5 BLK
2 BLK
3 BLK
1
B-184
4
H-93
3
B-49 Earth Joint 10P2
5
1
E-31
0.75 BLK
Vacuum Tank Switch
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
B-52
B-52
E-74
LNWH80XF001001

4645390


Engine Control Module (ECM)
Control
Control
Transmission Control Module (TCM)
Lamp Control
86
61
J-14
3
B-228
0.5 ORN/ BLU
0.5 YEL/ BLK
0.5 YEL/ BLK
8
11
H-80
2
H-84
0.5 VIO
0.5 BLU
0.5 YEL/ BLK
24
22
25
B-105
Instrument Panel (IP) Cluster
Glow
MIL
Check Trans
A
C.P.U
I/F
Oil Pressure &Level
DRL
Oil Level
21
20
19
33
B-105
0.35 BEI
0.5 BLU
0.5 LT GRN
0.5 YEL/ GRN
7
H-80
23
H-81
15
H-84
0.5 GRN/ WHT
0.5 BLU/ YEL
0.5 YEL/ GRN
Check Miles & Check Oil Level Switch
2
H-52
1
H-52
DRL Control Unit
0.5 GRN/ WHT
0.5 BLU/ YEL
1
E-29
1
E-30
Oil Level Switch
Engine Oil Pressure Switch
2
E-29
0.5 BLK
Refer to Ground Distribution
E-74
LNWG80XF004701

4496695


HOT WHEN LIGHTING SWITCH CLOSED
HOT AT ALL TIMES
HOT WHEN LIGHTING SWITCH CLOSED
Cab J/B1
F-14 H/Lamp Hi (LH) 10A
F-22 ECU (Batt) 10A
F-28 Illuminations 10A
8 B-19
Flasher Unit
Flasher Unit
3 B-22
10 B-18
0.5 RED
0.5 BRN
0.5 LT GRN
0.85 BLK/ BLU
0.85 LT GRN/ RED
1
11 B-131
17 B-135
14 B-131
16 H-84
Sub J/B1
14
16
10 B-136
16 B-131
18 B-135
17 B-138
0.5 RED
0.5 BLU
0.5 VIO
0.35 RED
0.35 WHT
0.5 GRY/ BLU
0.5 BLU
29
31
30 B-105
Instrument Panel (IP) Cluster
10 B-138
High Beam
Turn LH
Turn RH
Sub J/B1
11 B-136
C.P.U
ILL-
I/F
I/F
LCD Back Light
IP Cluster
IP Cluster
0.35 PNK
0.35 BEI
0.5 BLU
4
2
8 B-239
Check Miles & Check Oil Level Switch
GND
4
7
6 B-105
3
1
7 B-239
0.5 GRY
3
B-506 J/C 10P BASE 2
10
2 GRY
Illumination Control Switch
W/S-18
0.5 YEL
0.5 YEL
0.5 YEL
0.5 LT BLU
9 B-136
1 B-135
7
3 B-138
5 B-134
Sub J/B1
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
LNWG80XF004801

4496696

Description and Operation

Instrument Cluster Description and Operation

Description of Function and Operation

The following gauges and various warnings / indicators (warning lamp and indicator lamp) are assembled to the instrument panel (IP) cluster.

- Speedometer
- Tachometer (engine rpm gauge)
- Fuel gauge
- Engine coolant temperature gauge
- Odometer/ Trip meter
- Shift indicator
- Multi-information display

These components cannot be replaced separately because they are integrated with the IP cluster.

In addition, they are communicating with the engine control module (ECM), the transmission control module (TCM), the MIMAMORI control unit and the electronic hydraulic control unit (EHCU) etc. via ECU and CAN.

Speedometer

Speedometer indicates the vehicle speed based on the vehicle speed signal outputted from the engine control module (ECM). The vehicle speed signal is corrected at ECM and inputted into the IP cluster through CAN communication.

Tachometer

Tachometer indicates the engine revolutions based on the engine revolution signal from ECM. The engine speed signal is a signal from the crankshaft position (CKP) sensor detected by ECM and inputted into the IP cluster through CAN communication.

Fuel Gauge

Fuel gauge indicates the remaining fuel level based on the signal of the fuel tank unit of the fuel tank. Fuel gauge indicates the remaining fuel level as "low" when the resistance of the fuel level detector of the fuel tank unit is high. The fuel gauge indicates the remaining fuel level as "high" when the resistance of the fuel level detector is low.

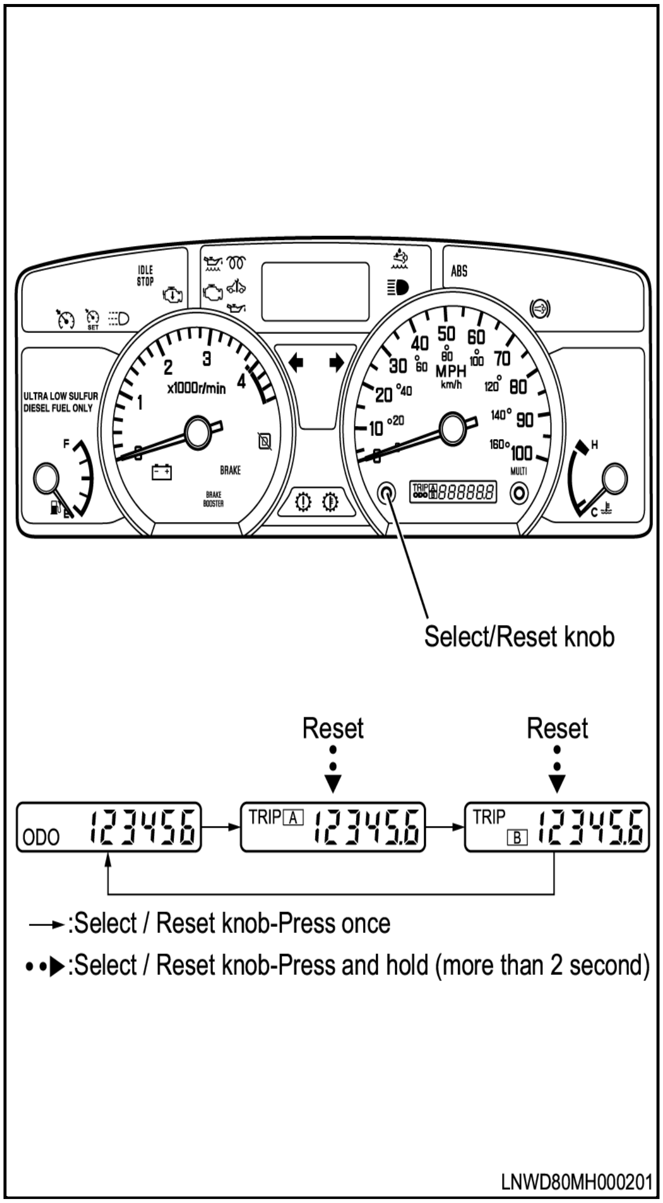
Engine Coolant Temperature Gauge

Engine coolant temperature gauge indicates the engine coolant temperature based on the engine coolant temperature signal from the ECM. The engine coolant temperature signal is a signal from the engine coolant temperature (ECT) sensor, which is detected by ECM and inputted into the thermometer through CAN communication.

Odometer/Trip Meter

Odometer/ trip meter calculate and display the mileage based on the vehicle speed signal from the ECM or from the vehicle speed sensor. Odometer/ trip meter will be displayed for 5 minutes after the ignition switch is turned "OFF".

Switch the display using the Select/ Reset knob operation.



4496698

Switching indication

- ODO > TRIP A > TRIP B > ODO

Hour Meter

The hour meter uses multi-information display to show accumulated engine operating time. The engine operating time is calculated by MIMAMORI control unit interlocked with the engine operation and inputted into the IP cluster through CAN communication. When the engine operation time data has not been obtained through CAN communication for 2 seconds or more, "ERROR" is displayed on the multi-information display.

Refer to MIMAMORI control for resetting counters.

Multi-information Display

The display functions to display information, warning lamp, indicator lamp and maintenance information.

Information Display

- Total fuel consumption, Sectional fuel consumption, and Instantaneous fuel consumption.

  If the speedometer is graduated in both mile and kilometer, the fuel economy is indicated in miles per gallon (MPG).

  – Fuel consumption display is requested to the MIMAMORI and the data obtained through CAN communication will be displayed. When the fuel consumption indication data has not been obtained through CAN communication for 2 seconds or more, "ERROR" is displayed on the multi-information display.

  – "99.9MPG" is displayed when the total or the sectional fuel consumption data is 99.9MPG or more.

  – The total fuel consumption display is reset at the MIMAMORI. Refer to MIMAMORI System.

  – The sectional fuel consumption is reset when you reset the trip B.

  – The instantaneous fuel consumption is the fuel consumption at a certain moment while driving the vehicle.
- DPF display

  – When DPF display is selected, the DPF regeneration status signal is obtained through CAN communication from ECM. PM accumulation volume is displayed when there is no regeneration, and the DPF regeneration progress will be displayed when DPF is under regeneration.

  – PM accumulation volume is displayed in 6 levels. The display on the multi-information display increases as the accumulation volume increases.

  – DPF regeneration progress is displayed in 6 levels. The display on the multi-information display decreases as the regeneration progresses.
- Selective catalyst reduction (SCR) system display

  – The selective catalyst reduction (SCR) displays in a scale of 4 levels.
- Voltage meter

  – The voltage meter displays the battery voltage in a scale of 9 levels.
- Calendar and Clock
- Dimmer

  – The brightness of MID can be adjusted while the light control switch is OFF.

Warning Lamp and Indicator Lamp Display

- Air cleaner indicator lamp
- Exhaust system warning lamp
- Regeneration required warning lamp
- Selectable (switch) regeneration required warning lamp
- Regeneration in progress indicator lamp
- Checking PM level indicator lamp
- Low fuel warning lamp
- Water separator (fuel filter) warning lamp
- Engine overheat warning lamp
- Restart time(s) warning lamp
- No restart warning lamp
- Meter failure
- CAN system error
- Refill diesel exhaust fluid (DEF) warning lamp
- SCR system malfunction warning
- Incorrect diesel exhaust fluid (DEF) warning lamp

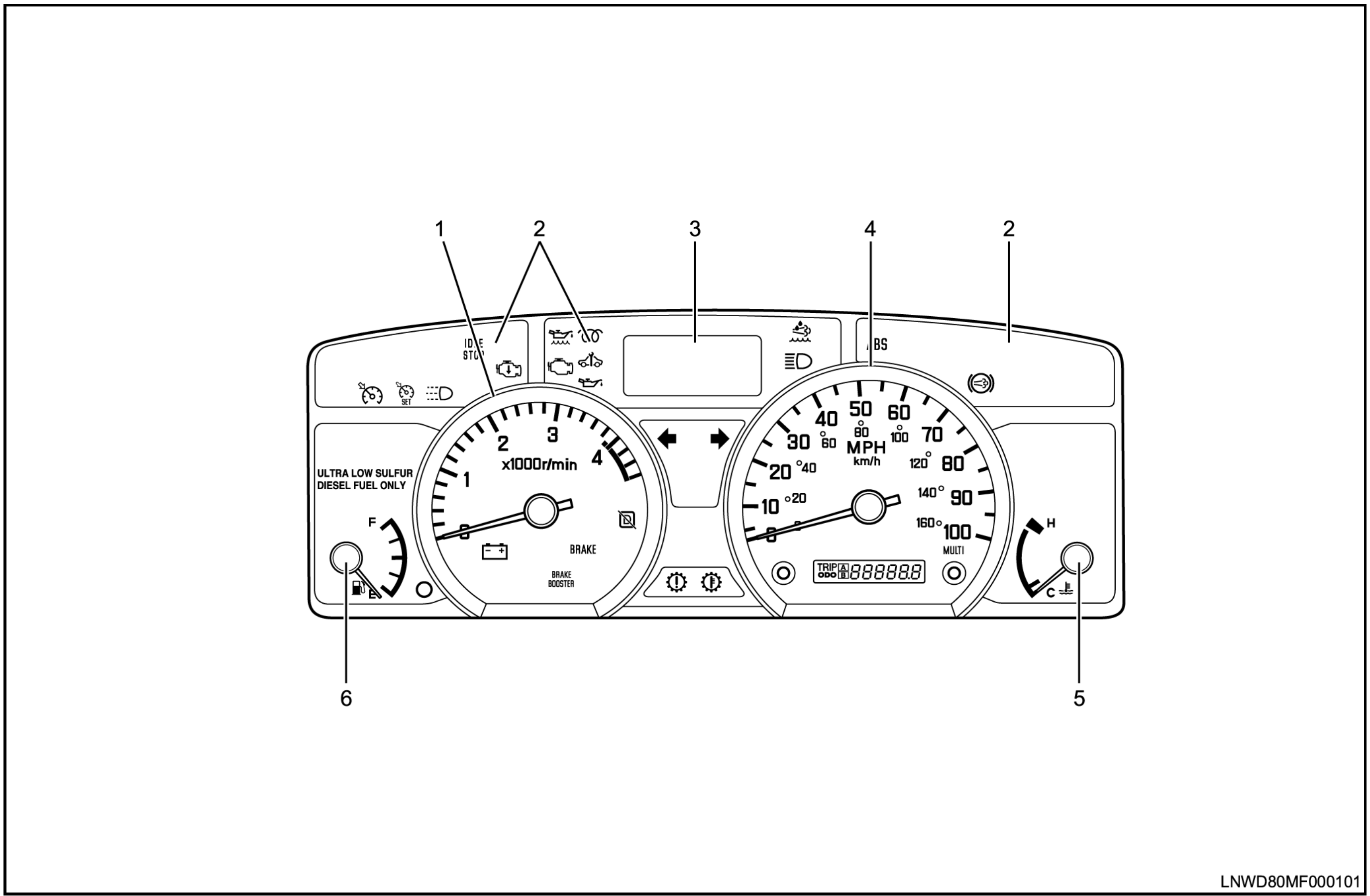
Maintenance Indications

- Engine oil and Filter indicator lamp
- Transmission and differential gear oil indicator lamp
- Starter indicator lamp
- Fuel filter indicator lamp
- Power steering fluid indicator lamp
- Tire rotation indicator lamp

The maintenance display displays the maintenance schedule for each item. Pre-set distances of each maintenance item are counted down and maintenance recommended periods are indicated by color changes from (Green) to (Amber) and warnings are displayed when turning the ignition switch to "ON". (The maintenance display is displayed when the vehicle speed is 16MPH (25km/h) or less.)

Instrument Cluster Description

LAYOUT FOR GAUGES, WARNING, INDICATOR AND ILLUMINATION LIGHTS (MID)

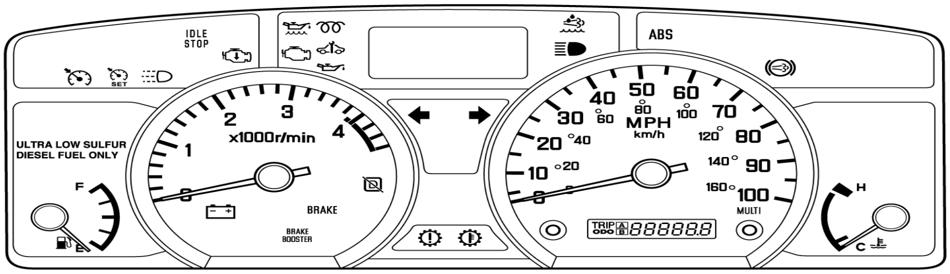

1
2
3
4
2
IDLE STOP
ABS
ULTRA LOW SULFUR DIESEL FUEL ONLY
F
E
0
1
2
3
4
x1000r/min
BRAKE
BRAKE BOOSTER
10
20
30
40
50
60
70
80
90
100
20
40
60
80
100
120
140
160
MPH
km/h
MULTI
TRIP
ODO
H
C
6
5
LNWD80MF000101

4496725

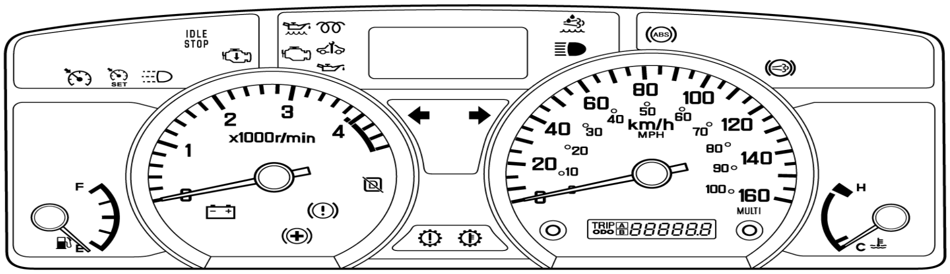
Legend

(1)	Tachometer	(4)	Speedometer
(2)	Warning/Indicator	(5)	Coolant Temperature Gauge
(3)	Multi-Information Display (MID)	(6)	Fuel Gauge

WARNING/INDICATOR (MID)


IDLE STOP
ABS
ULTRA LOW SULFUR DIESEL FUEL ONLY
SET
F
E
1
2
3
4
x1000r/min
BRAKE
BRAKE BOOSTER
10
20
30
40
50
60
70
80
90
100
MPH
km/h
20
40
60
80
100
120
140
160
TRIP
ODO
A
B
888888
MULTI
H
C

Canada equipment

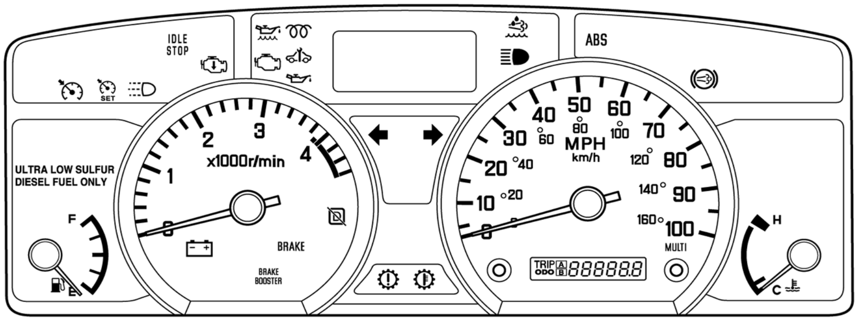

IDLE STOP
ABS
SET
F
E
1
2
3
4
x1000r/min
20
40
60
80
100
120
140
160
km/h
MPH
10
20
30
40
50
60
70
80
90
100
TRIP
ODO
A
B
888888
MULTI
H
C

LNWD80LF000401

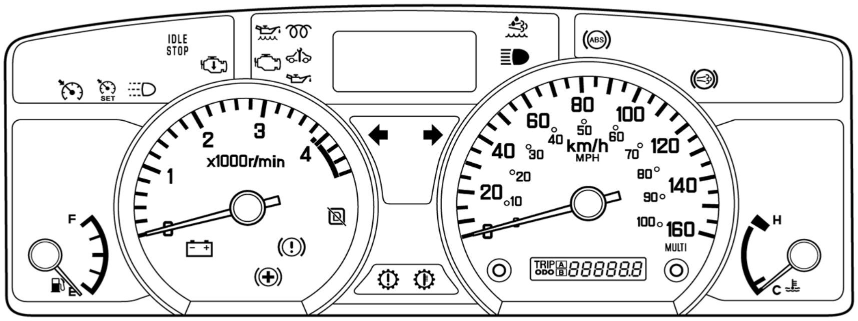
4496728

Visual Identification

Instrument Cluster Connector End View


IDLE STOP
ABS
SET
ULTRA LOW SULFUR DIESEL FUEL ONLY
x1000r/min
1
2
3
4
0
F
E
BRAKE
BRAKE BOOSTER
MPH
km/h
0
10
20
30
40
50
60
70
80
90
100
MULTI
TRIP
H
C

Canada equipment


IDLE STOP
SET
ABS
x1000r/min
1
2
3
4
0
F
E
km/h
MPH
0
20
40
60
80
100
120
140
160
MULTI
TRIP
H
C

4496730

B-105

Terminal No.	Connected to
1	Battery
2	Ignition
3	Miles Check
4	Power Ground
5	Signal Ground
6	Illumination (+)
7	Illumination (-)
8	Fuel Input
9	CAN - H
10	CAN - L
11	(Reserved : kw)
12	DIAG
13	Charge
14	Brake Oil Tank/HAB Tank
15	Park Brake
16	Brake Booster
17	(Reserved: B8)

B-105 (cont'd)

Terminal No.	Connected to
18	(Reserved: C3)
19	Oil Pressure and Level
20	Oil Level Switch
21	Oil Level Check Switch
22	Malfunction Indicator Lamp
23	Water Separator
24	Glow
25	Check Trans
26	AT Oil Temp
27	OD OFF
28	(Reserved: A22)
29	High Beam
30	Turn RH
31	Turn LH
32	(Reserved: A7)
33	DRL
34	Air Cleaner
35	(Reserved: A19)

B-105 (cont'd)

Terminal No.	Connected to
36	Seat Belt
37	(Reserved: A18)
38	(Reserved: B3)
39	(Reserved: A8)
40	(Reserved: C4)

Description and Operation

Keyless Entry System Circuit Description

The circuit consists of the keyless entry control unit, remote controller key, key remaind switch, door lock relay, door lock motor, door switch, and etc..

The signal that the keyless entry control unit receives is sent to the door lock relay when the remote controller key button is pressed. The door lock relay operates the door lock motor and the doors will be locked or unlocked.

The Keyless Entry System is equipped with the following functions.

- Lock and unlock functions by remote controller operation, auto re-lock function and retry function.
- Remote controller key registration function
- Answer-back function

For lock and unlock functions with the remote controller operation, when locking/unlocking, the driver side door and passenger side door are controlled at the same time. For double cab models, the rear doors are also controlled at the same time.

The auto re-lock function locks the door automatically if the door is not open for 30 seconds or more after unlocking.

The remote controller operation is disabled if the following are met.

- Battery power supply is not applied to the keyless entry control unit.
- The key is inserted into the key cylinder.
- The door is open.
- The ignition switch position is ON or ACC.

If the driver side door is not locked when the doors are locked by the remote controller operation, the retry function locks automatiocally one second later (only once).

When any of the following are met, until the retry function activates, the retry function is disabled.

- The door is open.
- The remote controller key is inserted to the key cylinder.
- An operation is newly performed by the remote controller key.

For the remote controller key registration function, the remote controller operation registration is accepted only from the genuine remote controller key. It is possible to register a maximum of 4 remote controller keys.

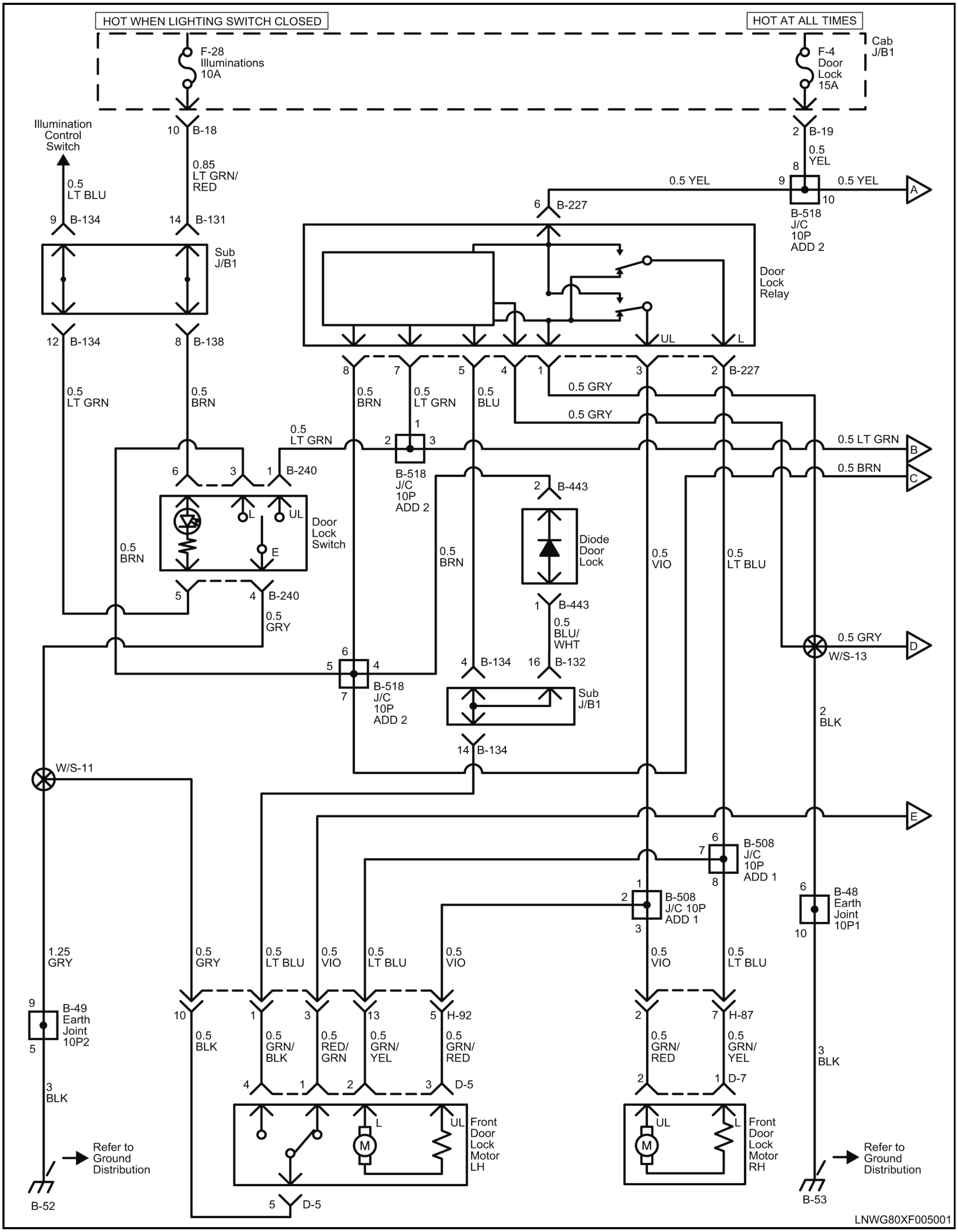
If 4 remote controller keys are registered, the oldest code is cleared for additional registrations. For the registration procedure of the remote controller key, refer to Registration of the remote controller key.

For the answer-back function, perform the answer-back using the hazard lights. There are the following 2 patterns for the answer-back. Answer-back will not activate when auto re-lock is performed.

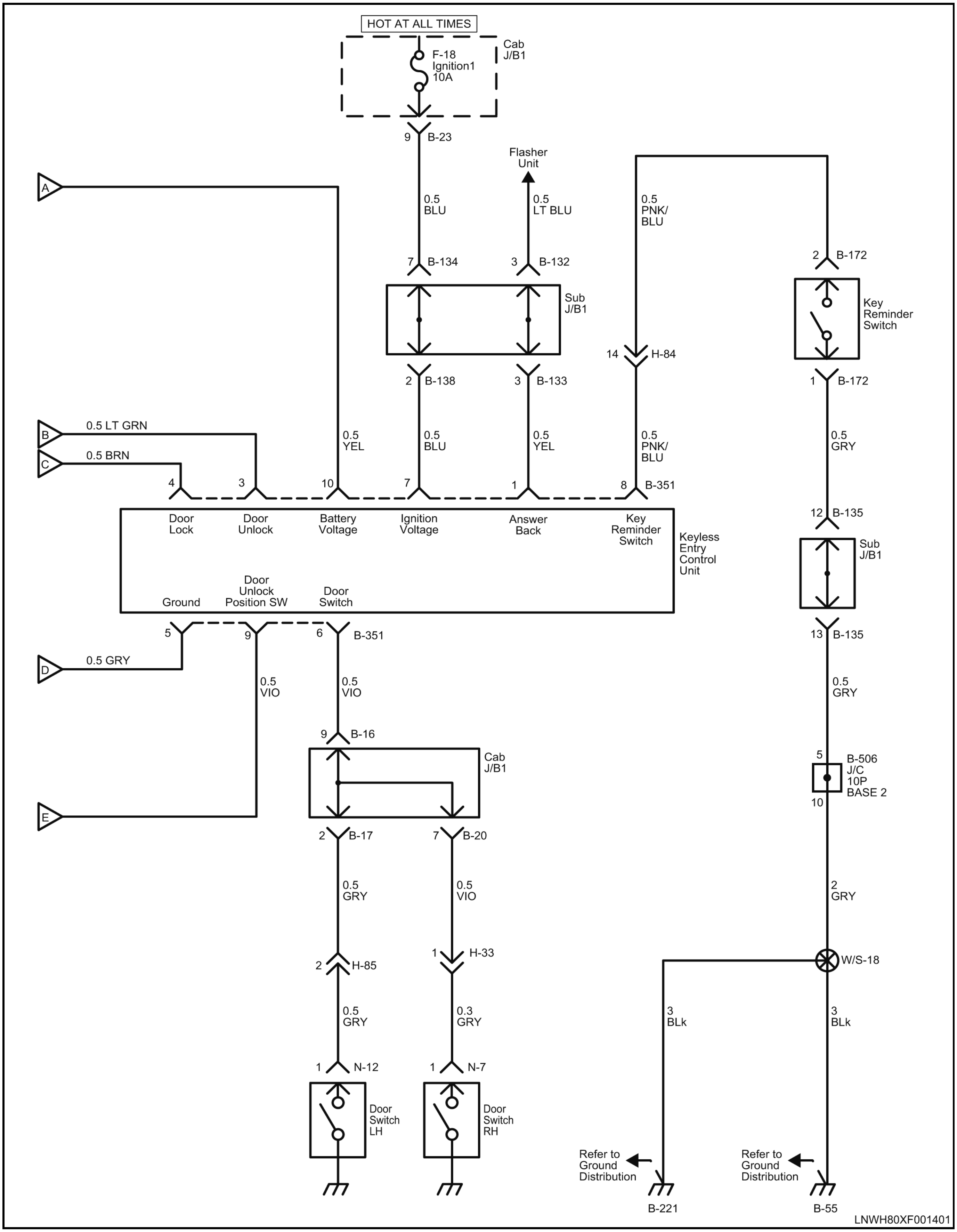
- 1 flash: when locked by the remote controller key or locked by the auto re-lock function.
- 2 flashes: when unlocked by the remote controller key

Schematic and Routing Diagrams

Keyless Entry Schematics


HOT WHEN LIGHTING SWITCH CLOSED
HOT AT ALL TIMES
F-28 Illuminations 10A
F-4 Door Lock 15A
Cab J/B1
Illumination Control Switch
10 B-18
2 B-19
0.85 LT GRN/ RED
0.5 YEL
0.5 LT BLU
8
9
10
0.5 YEL
0.5 YEL
A
B-518 J/C 10P ADD 2
6 B-227
9 B-134
14 B-131
Sub J/B1
Door Lock Relay
UL
L
12 B-134
8 B-138
8 7 5 4 1 3 2 B-227
0.5 LT GRN
0.5 BRN
0.5 BRN
0.5 LT GRN
0.5 BLU
0.5 GRY
0.5 GRY
0.5 LT GRN
1
2
3
B-518 J/C 10P ADD 2
0.5 LT GRN
B
0.5 BRN
C
6 3 1 B-240
L
UL
E
Door Lock Switch
2 B-443
Diode Door Lock
1 B-443
0.5 BRN
0.5 BRN
0.5 VIO
0.5 LT BLU
5 4 B-240
0.5 GRY
0.5 BLU/ WHT
0.5 GRY
D
W/S-13
6
5
4
7
B-518 J/C 10P ADD 2
4 B-134
16 B-132
Sub J/B1
2 BLK
14 B-134
W/S-11
E
6
7
8
B-508 J/C 10P ADD 1
1
2
3
B-508 J/C 10P ADD 1
6
10
B-48 Earth Joint 10P1
1.25 GRY
0.5 GRY
0.5 LT BLU
0.5 VIO
0.5 LT BLU
0.5 VIO
0.5 VIO
0.5 LT BLU
9
5
B-49 Earth Joint 10P2
10 1 3 13 5 H-92
2 7 H-87
0.5 BLK
0.5 GRN/ BLK
0.5 RED/ GRN
0.5 GRN/ YEL
0.5 GRN/ RED
0.5 GRN/ RED
0.5 GRN/ YEL
3 BLK
3 BLK
4 1 2 3 D-5
2 1 D-7
L
UL
M
Front Door Lock Motor LH
UL
L
M
Front Door Lock Motor RH
Refer to Ground Distribution
Refer to Ground Distribution
B-52
5 D-5
B-53
LNWG80XF005001

4496872


HOT AT ALL TIMES
Cab J/B1
F-18 Ignition1 10A
9 B-23
0.5 BLU
Flasher Unit
0.5 LT BLU
0.5 PNK/BLU
A
7 B-134
3 B-132
Sub J/B1
2 B-172
Key Reminder Switch
14 H-84
2 B-138
3 B-133
1 B-172
0.5 LT GRN
0.5 BRN
B
C
0.5 YEL
0.5 BLU
0.5 YEL
0.5 PNK/BLU
0.5 GRY
4
3
10
7
1
8 B-351
12 B-135
Door Lock
Door Unlock
Battery Voltage
Ignition Voltage
Answer Back
Key Reminder Switch
Keyless Entry Control Unit
Sub J/B1
Ground
Door Unlock Position SW
Door Switch
5
9
6 B-351
13 B-135
D
0.5 GRY
0.5 VIO
0.5 VIO
0.5 GRY
9 B-16
Cab J/B1
5 B-506 J/C 10P BASE 2
10
E
2 B-17
7 B-20
0.5 GRY
0.5 VIO
2 GRY
1 H-33
2 H-85
W/S-18
0.5 GRY
0.3 GRY
3 BLk
3 BLk
1 N-12
1 N-7
Door Switch LH
Door Switch RH
Refer to Ground Distribution
Refer to Ground Distribution
B-221
B-55
LNWH80XF001401

4645482

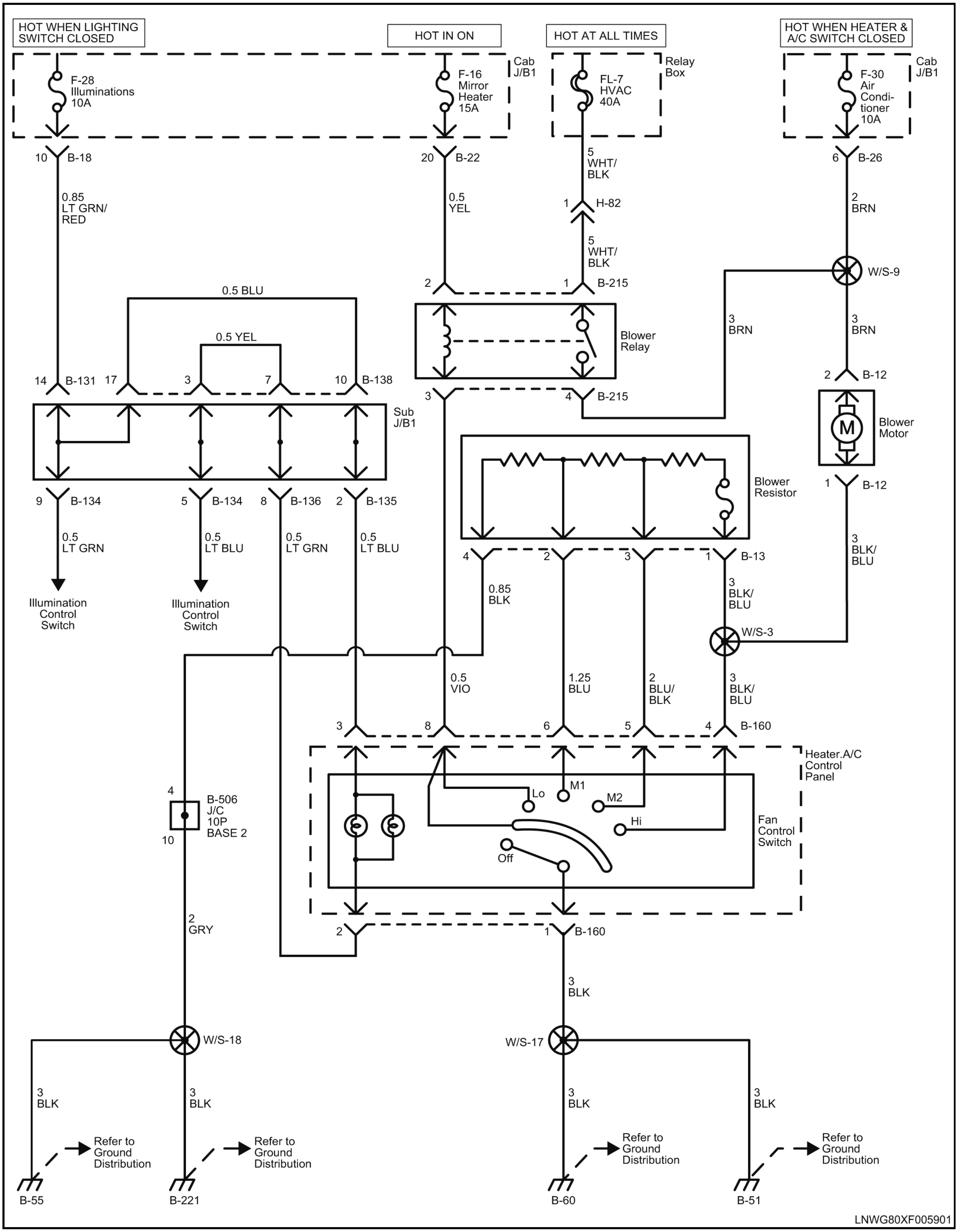
Description and Operation

HVAC Circuit Description

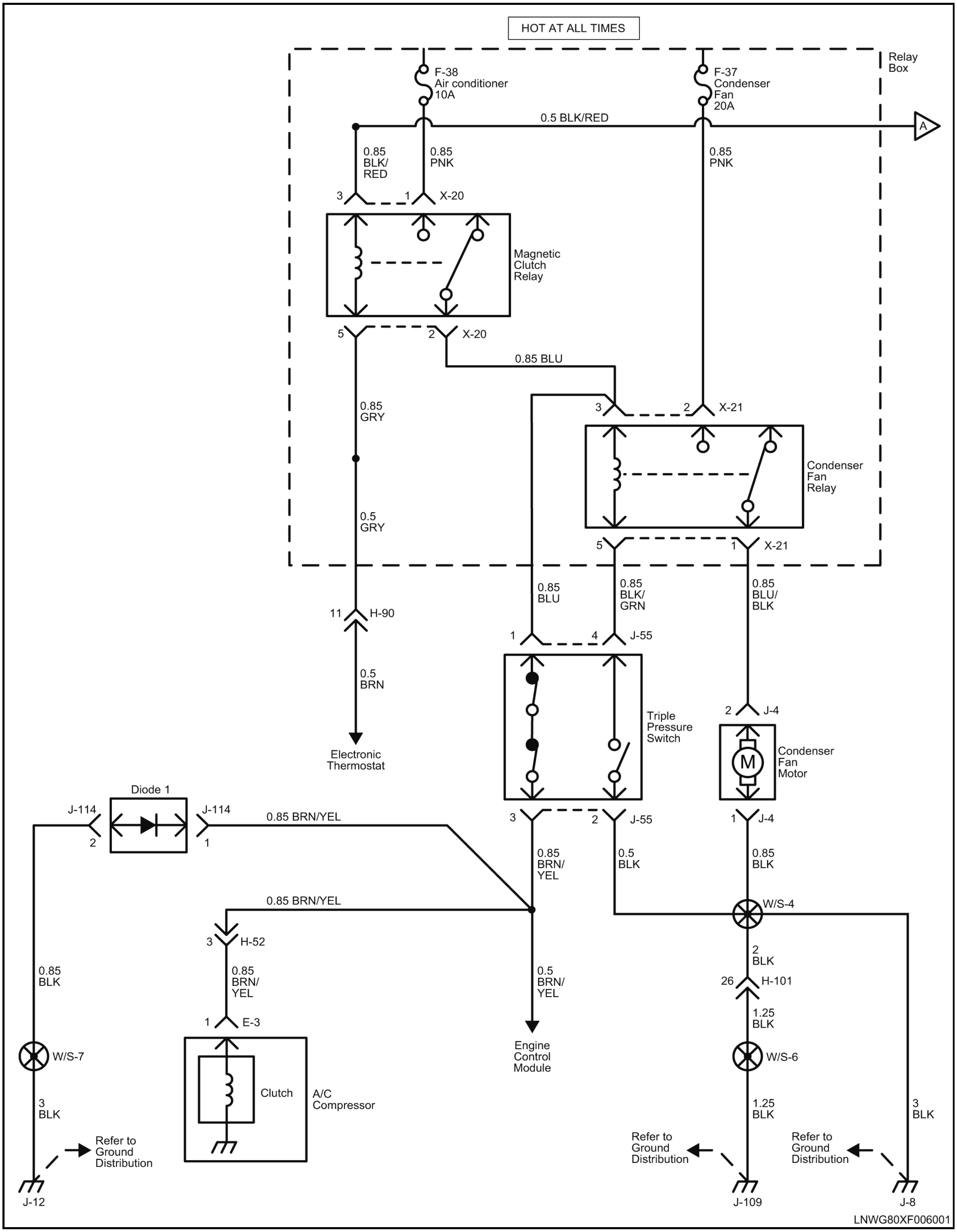
The air conditioning circuit consists of compressor, A/C switch, fan switch, etc. When the engine is rotating, the A/C starts to work with both the A/C and fan switches “ON”, followed by the engagement of the magnetic clutch. It stops to work when either the fan switch or the A/C switch turns “OFF”. In addition, the A/C has the function of temporary stop of its operation by function of the pressure switch when sensing abnormal rise of the refrigerant pressure.

Schematic and Routing Diagrams

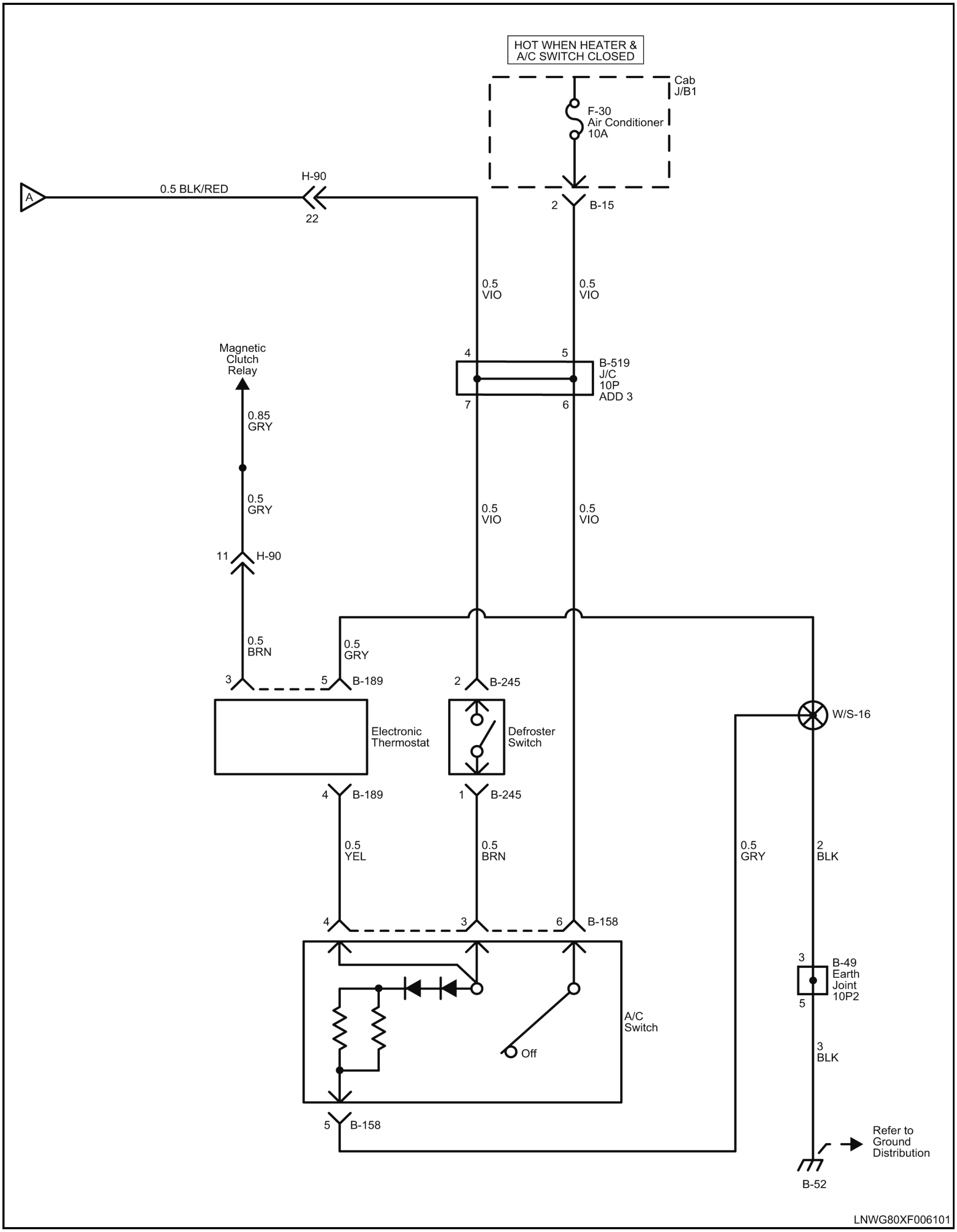
HVAC Schematics


HOT WHEN LIGHTING SWITCH CLOSED
HOT IN ON
HOT AT ALL TIMES
HOT WHEN HEATER & A/C SWITCH CLOSED
F-28 Illuminations 10A
F-16 Mirror Heater 15A
Cab J/B1
FL-7 HVAC 40A
Relay Box
F-30 Air Condi-tioner 10A
Cab J/B1
10 B-18
20 B-22
5 WHT/BLK
6 B-26
0.85 LT GRN/RED
0.5 YEL
1 H-82
2 BRN
5 WHT/BLK
W/S-9
0.5 BLU
2
1 B-215
0.5 YEL
Blower Relay
3 BRN
3 BRN
14 B-131
17
3
7
10 B-138
3
4 B-215
2 B-12
Sub J/B1
Blower Motor
M
Blower Resistor
9 B-134
5 B-134
8 B-136
2 B-135
1 B-12
0.5 LT GRN
0.5 LT BLU
0.5 LT GRN
0.5 LT BLU
4
2
3
1 B-13
3 BLK/BLU
Illumination Control Switch
Illumination Control Switch
0.85 BLK
3 BLK/BLU
W/S-3
0.5 VIO
1.25 BLU
2 BLU/BLK
3 BLK/BLU
3
8
6
5
4 B-160
Heater.A/C Control Panel
4
B-506 J/C 10P BASE 2
10
Lo
M1
M2
Hi
Off
Fan Control Switch
2 GRY
2
1 B-160
3 BLK
W/S-18
W/S-17
3 BLK
3 BLK
3 BLK
3 BLK
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
Refer to Ground Distribution
B-55
B-221
B-60
B-51
LNWG80XF005901

4496918


HOT AT ALL TIMES
Relay Box
F-38 Air conditioner 10A
F-37 Condenser Fan 20A
0.5 BLK/RED
A
0.85 BLK/ RED
0.85 PNK
0.85 PNK
3
1
X-20
Magnetic Clutch Relay
5
2
X-20
0.85 BLU
3
2
X-21
Condenser Fan Relay
5
1
X-21
0.85 GRY
0.5 GRY
11
H-90
0.5 BRN
Electronic Thermostat
0.85 BLU
0.85 BLK/ GRN
0.85 BLU/ BLK
1
4
J-55
Triple Pressure Switch
3
2
J-55
2
J-4
Condenser Fan Motor
M
1
J-4
Diode 1
J-114
2
J-114
1
0.85 BRN/YEL
0.85 BRN/ YEL
0.5 BLK
0.85 BLK
W/S-4
0.85 BRN/YEL
3
H-52
0.85 BRN/ YEL
1
E-3
Clutch
A/C Compressor
0.5 BRN/ YEL
Engine Control Module
2 BLK
26
H-101
1.25 BLK
W/S-6
1.25 BLK
0.85 BLK
W/S-7
3 BLK
Refer to Ground Distribution
J-12
Refer to Ground Distribution
J-109
Refer to Ground Distribution
3 BLK
J-8
LNWG80XF006001

4496927


HOT WHEN HEATER &
A/C SWITCH CLOSED
Cab
J/B1
F-30
Air Conditioner
10A
2
B-15
A
0.5 BLK/RED
H-90
22
0.5
VIO
0.5
VIO
Magnetic
Clutch
Relay
0.85
GRY
4
5
B-519
J/C
10P
ADD 3
7
6
0.5
GRY
0.5
VIO
0.5
VIO
11
H-90
0.5
BRN
0.5
GRY
3
5
B-189
2
B-245
W/S-16
Electronic
Thermostat
Defroster
Switch
4
B-189
1
B-245
0.5
YEL
0.5
BRN
0.5
GRY
2
BLK
4
3
6
B-158
3
B-49
Earth
Joint
10P2
5
A/C
Switch
Off
3
BLK
5
B-158
Refer to
Ground
Distribution
B-52
LNWG80XF006101

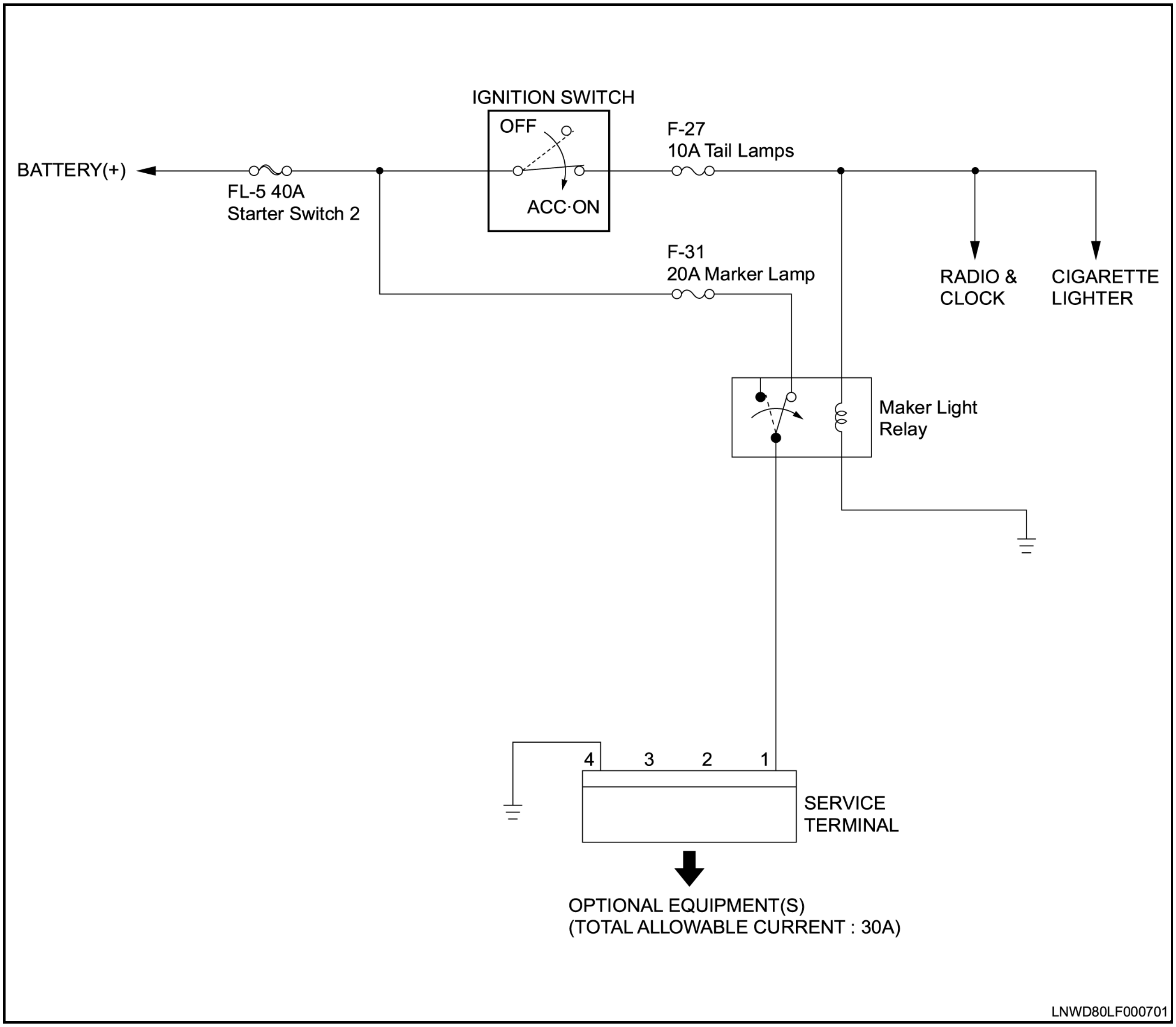
4496930

Description and Operation

Service Terminal Circuit Description

The circuit consists of the maker light relay, and the connector for the service terminal.

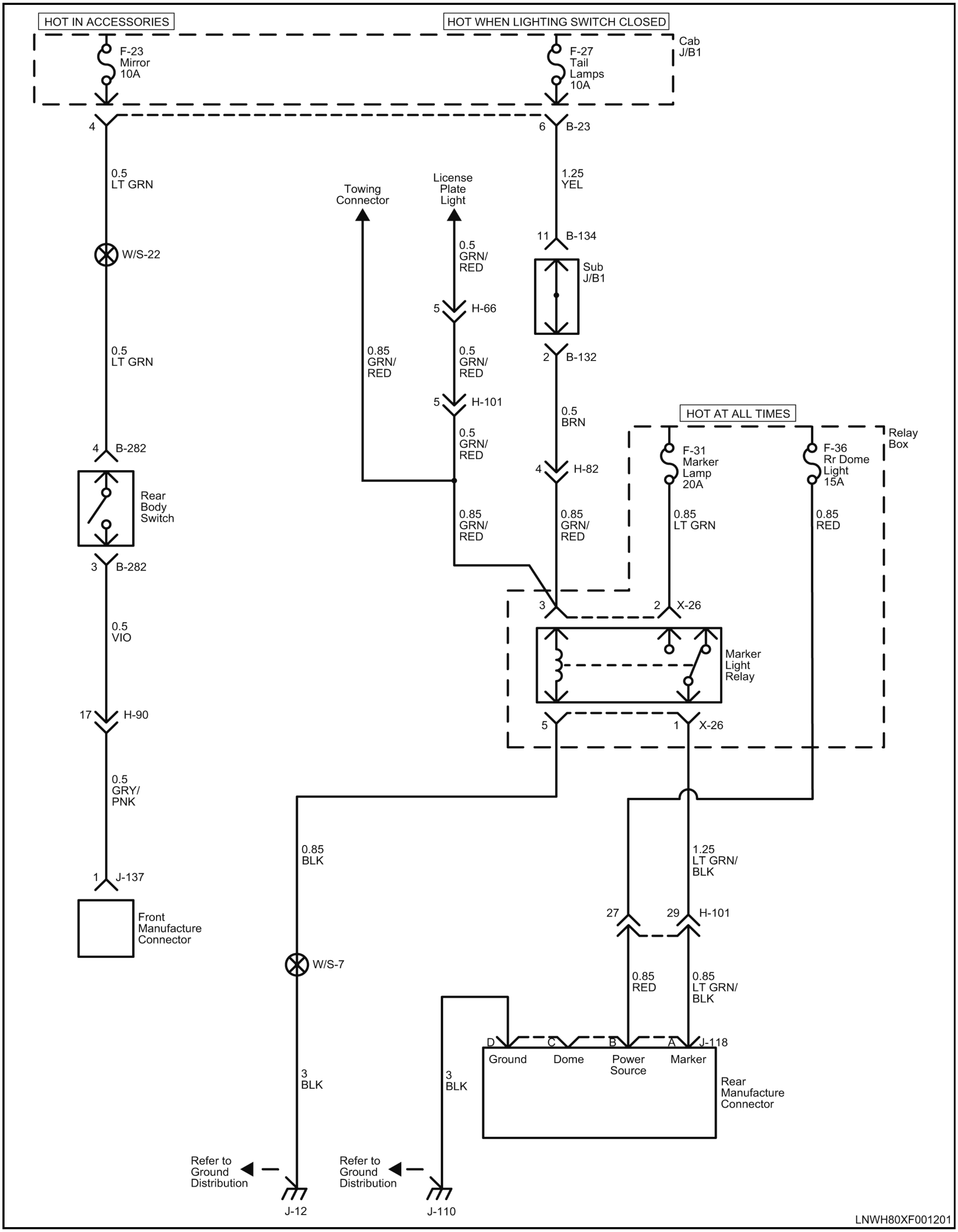
The service terminal connector is provided for Installation of optional equipment (S). This circuit incorporates a 20A fuse. Make sure that the total current of all installed parts does not exceed 20A.


IGNITION SWITCH
OFF
ACC·ON
BATTERY(+)
FL-5 40A
Starter Switch 2
F-27
10A Tail Lamps
F-31
20A Marker Lamp
RADIO &
CLOCK
CIGARETTE
LIGHTER
Maker Light
Relay
4
3
2
1
SERVICE
TERMINAL
OPTIONAL EQUIPMENT(S)
(TOTAL ALLOWABLE CURRENT : 30A)
LNWD80LF000701

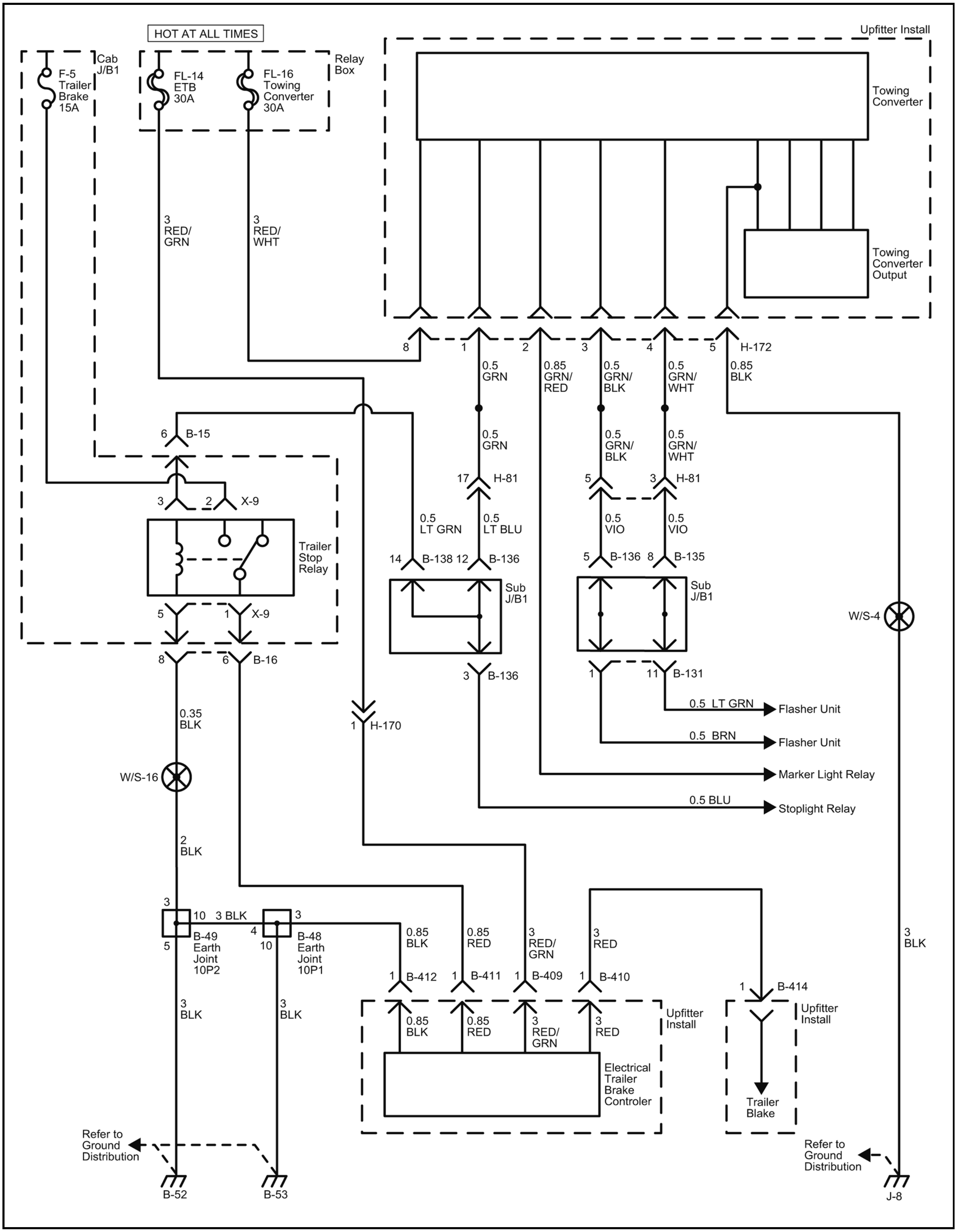
4496932

Schematic and Routing Diagrams

Service Terminal Schematics


HOT IN ACCESSORIES
HOT WHEN LIGHTING SWITCH CLOSED
F-23
Mirror
10A
F-27
Tail
Lamps
10A
Cab
J/B1
4
6
B-23
0.5
LT GRN
1.25
YEL
Towing
Connector
License
Plate
Light
W/S-22
11
B-134
0.5
GRN/
RED
Sub
J/B1
5
H-66
0.5
LT GRN
0.85
GRN/
RED
0.5
GRN/
RED
2
B-132
5
H-101
0.5
BRN
HOT AT ALL TIMES
Relay
Box
0.5
GRN/
RED
4
B-282
F-31
Marker
Lamp
20A
F-36
Rr Dome
Light
15A
4
H-82
Rear
Body
Switch
0.85
GRN/
RED
0.85
GRN/
RED
0.85
LT GRN
0.85
RED
3
B-282
3
2
X-26
0.5
VIO
Marker
Light
Relay
17
H-90
5
1
X-26
0.5
GRY/
PNK
0.85
BLK
1.25
LT GRN/
BLK
1
J-137
27
29
H-101
Front
Manufacture
Connector
W/S-7
0.85
RED
0.85
LT GRN/
BLK
D
C
B
A
J-118
Ground
Dome
Power
Source
Marker
3
BLK
3
BLK
Rear
Manufacture
Connector
Refer to
Ground
Distribution
Refer to
Ground
Distribution
J-12
J-110
LNWH80XF001201

4645451


HOT AT ALL TIMES
Cab J/B1
F-5 Trailer Brake 15A
Relay Box
FL-14 ETB 30A
FL-16 Towing Converter 30A
Upfitter Install
Towing Converter
Towing Converter Output
3 RED/ GRN
3 RED/ WHT
8
1
2
3
4
5
H-172
0.5 GRN
0.85 GRN/ RED
0.5 GRN/ BLK
0.5 GRN/ WHT
0.85 BLK
6 B-15
0.5 GRN
0.5 GRN/ BLK
0.5 GRN/ WHT
17 H-81
5
3 H-81
3
2 X-9
0.5 LT GRN
0.5 LT BLU
0.5 VIO
0.5 VIO
Trailer Stop Relay
14 B-138 12 B-136
5 B-136 8 B-135
Sub J/B1
Sub J/B1
W/S-4
5
1 X-9
8
6 B-16
3 B-136
1
11 B-131
0.5 LT GRN
Flasher Unit
0.5 BRN
Flasher Unit
Marker Light Relay
0.5 BLU
Stoplight Relay
0.35 BLK
1 H-170
W/S-16
2 BLK
3
10 3 BLK
3
5
B-49 Earth Joint 10P2
4
10
B-48 Earth Joint 10P1
0.85 BLK
0.85 RED
3 RED/ GRN
3 RED
3 BLK
1 B-412
1 B-411
1 B-409
1 B-410
1 B-414
3 BLK
3 BLK
0.85 BLK
0.85 RED
3 RED/ GRN
3 RED
Upfitter Install
Electrical Trailer Brake Controler
Upfitter Install
Trailer Blake
Refer to Ground Distribution
Refer to Ground Distribution
B-52
B-53
J-8

4496941

Description and Operation

Power Windows

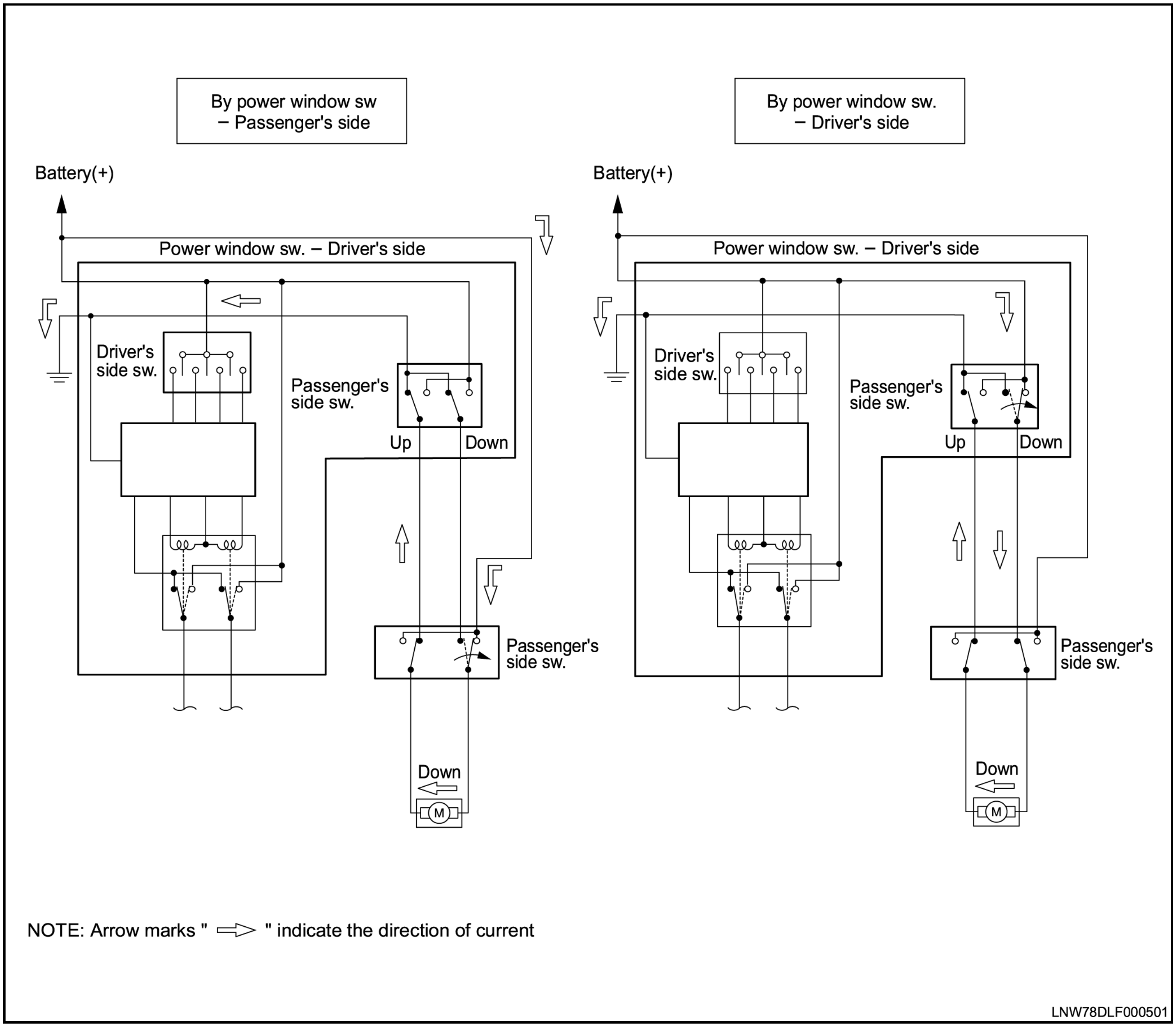
The circuit consist of the ignition switch, power window switch for each of the windows and power window motor.

When the ignition switch is turned on, the battery voltage is applied to each of the power window switches through the circuit breaker and the power window relay on the circuit.

By operating the switches of each window to select "UP" or "DOWN", the revolving direction of the power window motor changes to open or close the window.

The driver's power window switch has a built-in one-touch operating circuit which allows to automatically open the window by operating the switch to the AUTO position.

Operation of Passenger Side Window

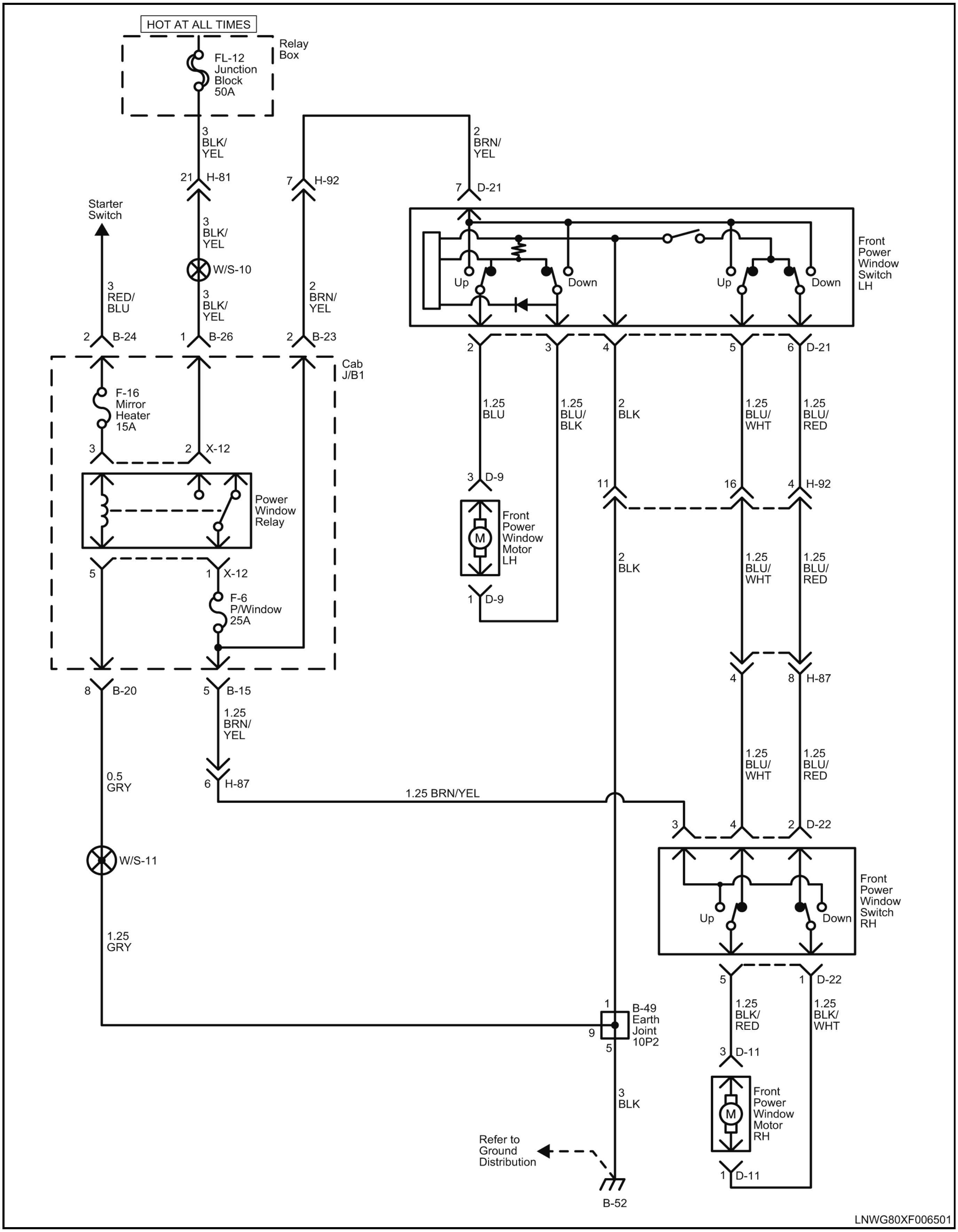

By power window sw
– Passenger's side
By power window sw.
– Driver's side
Battery(+)
Battery(+)
Power window sw. – Driver's side
Power window sw. – Driver's side
Driver's side sw.
Passenger's side sw.
Up
Down
Driver's side sw.
Passenger's side sw.
Up
Down
Passenger's side sw.
Passenger's side sw.
Down
M
Down
M
LNW78DLF000501

NOTE: Arrow marks " ⇨ " indicate the direction of current

4496952

Schematic and Routing Diagrams

Power Window Schematics


HOT AT ALL TIMES
Relay Box
FL-12 Junction Block 50A
3 BLK/ YEL
21 H-81
7 H-92
2 BRN/ YEL
7 D-21
Starter Switch
3 BLK/ YEL
W/S-10
3 RED/ BLU
3 BLK/ YEL
2 BRN/ YEL
2 B-24
1 B-26
2 B-23
Front Power Window Switch LH
Up
Down
Up
Down
2
3
4
5
6 D-21
Cab J/B1
F-16 Mirror Heater 15A
3
2 X-12
Power Window Relay
5
1 X-12
F-6 P/Window 25A
1.25 BLU
1.25 BLU/ BLK
2 BLK
1.25 BLU/ WHT
1.25 BLU/ RED
3 D-9
Front Power Window Motor LH
M
1 D-9
11
16
4 H-92
2 BLK
1.25 BLU/ WHT
1.25 BLU/ RED
4
8 H-87
8 B-20
5 B-15
1.25 BRN/ YEL
0.5 GRY
6 H-87
1.25 BRN/YEL
1.25 BLU/ WHT
1.25 BLU/ RED
3
4
2 D-22
W/S-11
Front Power Window Switch RH
Up
Down
1.25 GRY
5
1 D-22
1.25 BLK/ RED
1.25 BLK/ WHT
1
9
5
B-49 Earth Joint 10P2
3 D-11
Front Power Window Motor RH
M
3 BLK
Refer to Ground Distribution
1 D-11
B-52
LNWG80XF006501

4496956

Description and Operation

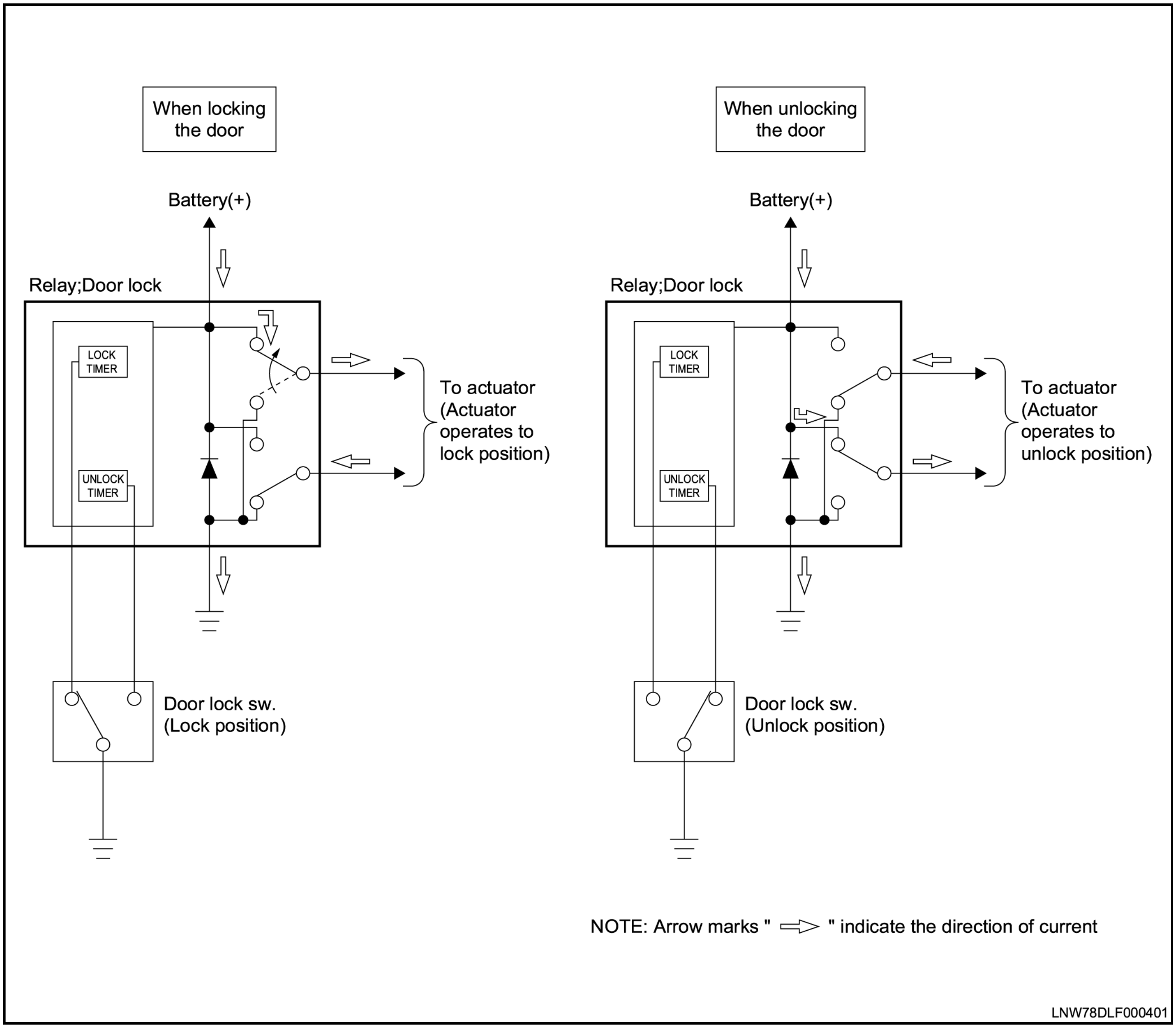
Power Door Locks Circuit Description

The circuit consists of the door lock switch, actuator for the front passenger side door, and the door lock controller.

The door lock relay is always provided with battery voltage. The key or the inside lock knob on the drivers side door can activate the lock mechanism of all the doors.

When the drivers side door lock switch is turned on, current flows for about one second to the door lock actuator of each door connected in parallel with the relay to activates the actuator to lock and unlock the doors.

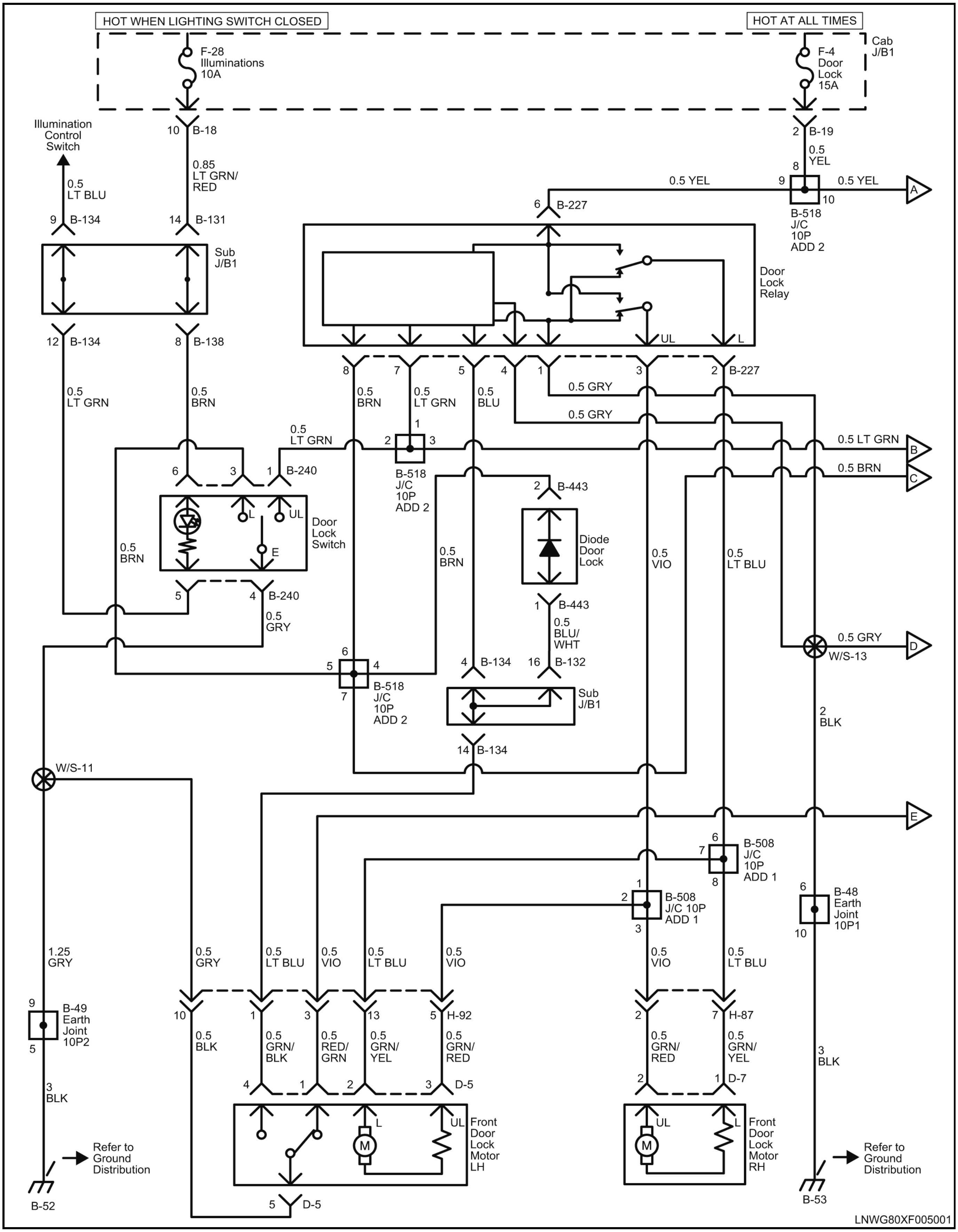
OPERATION OF DOOR LOCK CONTROLLER


When locking the door
Battery(+)
Relay;Door lock
LOCK TIMER
UNLOCK TIMER
To actuator (Actuator operates to lock position)
Door lock sw. (Lock position)
When unlocking the door
Battery(+)
Relay;Door lock
LOCK TIMER
UNLOCK TIMER
To actuator (Actuator operates to unlock position)
Door lock sw. (Unlock position)
NOTE: Arrow marks " ⇨ " indicate the direction of current
LNW78DLF000401

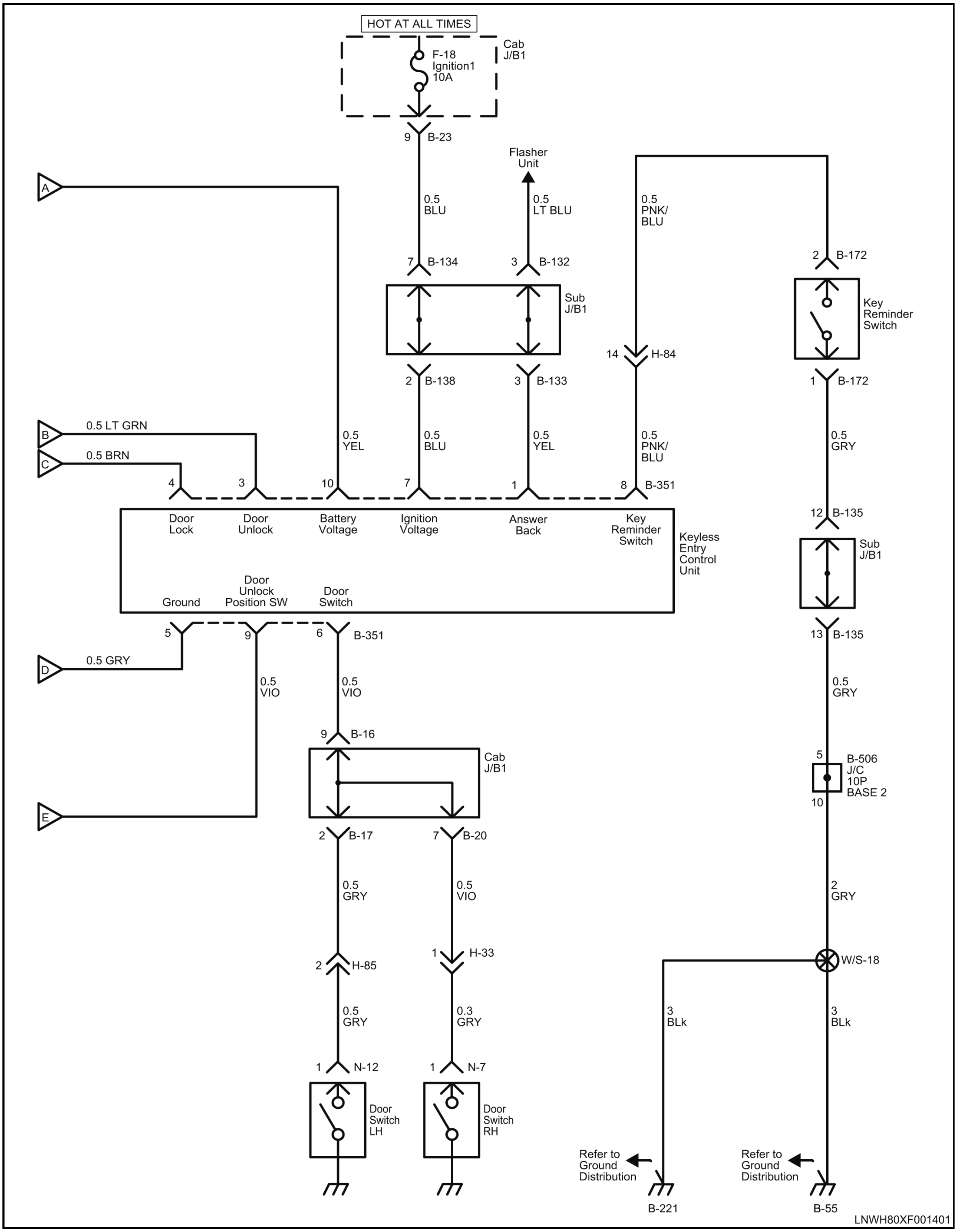
4496990

Schematic and Routing Diagrams

Power Door Lock Schematics


HOT WHEN LIGHTING SWITCH CLOSED
HOT AT ALL TIMES
Cab J/B1
F-28 Illuminations 10A
F-4 Door Lock 15A
Illumination Control Switch
10 B-18
2 B-19
0.5 YEL
0.85 LT GRN/ RED
0.5 LT BLU
8
0.5 YEL
9
0.5 YEL
10
A
B-518 J/C 10P ADD 2
6 B-227
9 B-134
14 B-131
Sub J/B1
Door Lock Relay
12 B-134
8 B-138
UL
L
8
7
5
4
1
3
2 B-227
0.5 LT GRN
0.5 BRN
0.5 BRN
0.5 LT GRN
0.5 BLU
0.5 GRY
0.5 GRY
0.5 LT GRN
1
2
3
0.5 LT GRN
B
0.5 BRN
C
6
3
1 B-240
B-518 J/C 10P ADD 2
2 B-443
L
UL
Door Lock Switch
E
0.5 BRN
0.5 BRN
Diode Door Lock
0.5 VIO
0.5 LT BLU
5
4 B-240
1 B-443
0.5 GRY
0.5 BLU/ WHT
0.5 GRY
D
W/S-13
6
5
4
4 B-134
16 B-132
B-518 J/C 10P ADD 2
7
Sub J/B1
2 BLK
14 B-134
W/S-11
E
6
B-508 J/C 10P ADD 1
7
8
1
2
B-508 J/C 10P ADD 1
3
6
B-48 Earth Joint 10P1
10
1.25 GRY
0.5 GRY
0.5 LT BLU
0.5 VIO
0.5 LT BLU
0.5 VIO
0.5 VIO
0.5 LT BLU
9
B-49 Earth Joint 10P2
5
10
1
3
13
5 H-92
2
7 H-87
0.5 BLK
0.5 GRN/ BLK
0.5 RED/ GRN
0.5 GRN/ YEL
0.5 GRN/ RED
0.5 GRN/ RED
0.5 GRN/ YEL
3 BLK
3 BLK
4
1
2
3 D-5
2
1 D-7
L
UL
Front Door Lock Motor LH
M
UL
L
Front Door Lock Motor RH
M
Refer to Ground Distribution
Refer to Ground Distribution
B-52
5 D-5
B-53
LNWG80XF005001

4496993


HOT AT ALL TIMES
F-18
Ignition1
10A
Cab
J/B1
9
B-23
0.5
BLU
Flasher
Unit
0.5
LT BLU
0.5
PNK/
BLU
A
7
B-134
3
B-132
Sub
J/B1
2
B-172
Key
Reminder
Switch
14
H-84
2
B-138
3
B-133
1
B-172
B
0.5 LT GRN
C
0.5 BRN
0.5
YEL
0.5
BLU
0.5
YEL
0.5
PNK/
BLU
0.5
GRY
4
3
10
7
1
8
B-351
12
B-135
Door
Lock
Door
Unlock
Battery
Voltage
Ignition
Voltage
Answer
Back
Key
Reminder
Switch
Keyless
Entry
Control
Unit
Sub
J/B1
Ground
Door
Unlock
Position SW
Door
Switch
5
9
6
B-351
13
B-135
D
0.5 GRY
0.5
VIO
0.5
VIO
0.5
GRY
9
B-16
Cab
J/B1
5
B-506
J/C
10P
BASE 2
10
E
2
B-17
7
B-20
0.5
GRY
0.5
VIO
2
GRY
2
H-85
1
H-33
W/S-18
0.5
GRY
0.3
GRY
3
BLk
3
BLk
1
N-12
1
N-7
Door
Switch
LH
Door
Switch
RH
Refer to
Ground
Distribution
Refer to
Ground
Distribution
B-221
B-55
LNWH80XF001401

4645482

Description and Operation

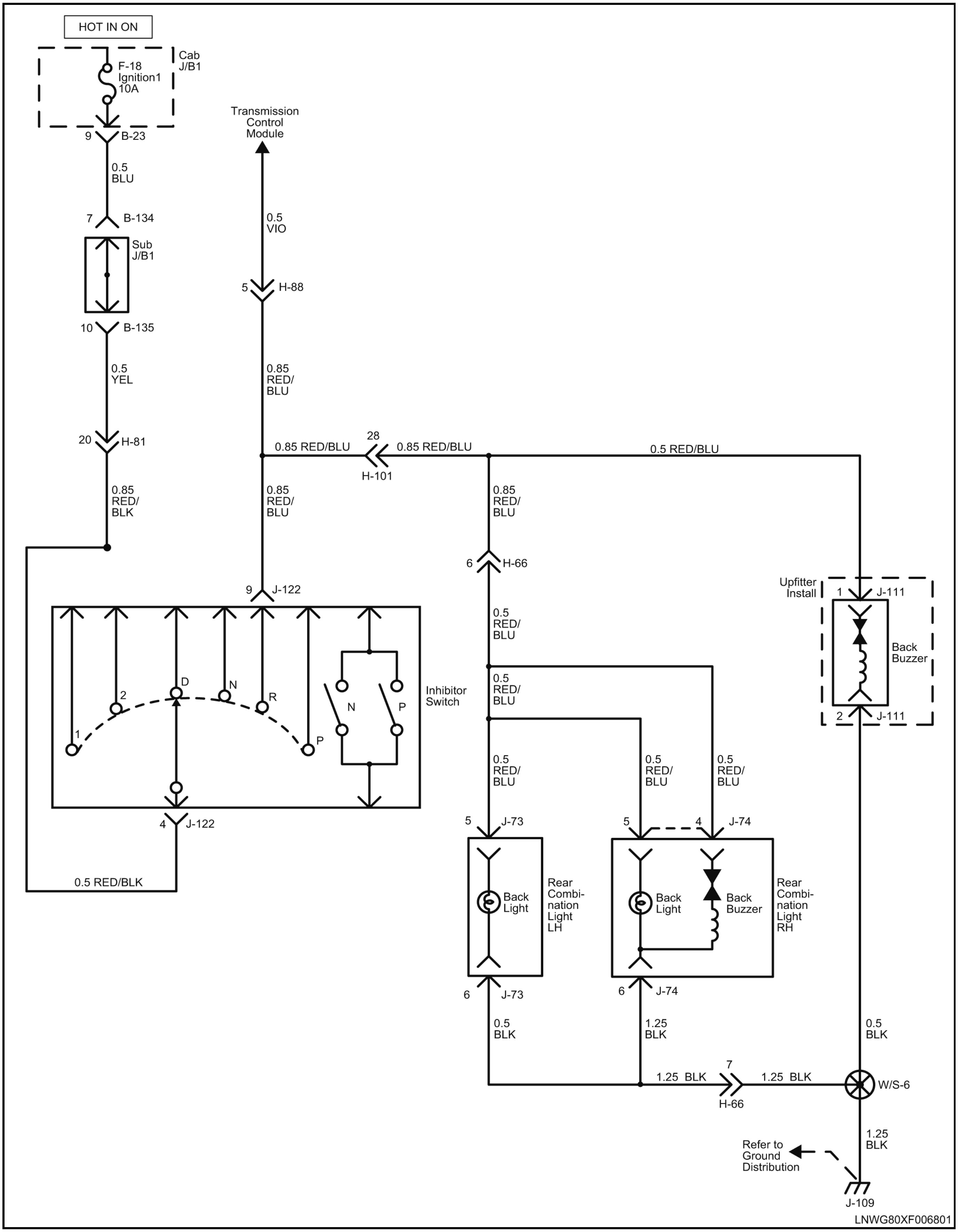
Backup Alarm System Circuit Description

The circuit consists of the backup light switch (or the inhibitor switch) and back buzzer.

When the reverse position is selected, the backup light switch (or the inhibitor switch) is turned ON and the back buzzer sound.

Schematic and Routing Diagrams

Backup Alarm System Schematics


HOT IN ON
F-18
Ignition1
10A
Cab
J/B1
9
B-23
0.5
BLU
7
B-134
Sub
J/B1
10
B-135
0.5
YEL
20
H-81
0.85
RED/
BLK
Transmission
Control
Module
0.5
VIO
5
H-88
0.85
RED/
BLU
0.85 RED/BLU
28
H-101
0.85 RED/BLU
0.5 RED/BLU
0.85
RED/
BLU
6
H-66
9
J-122
1
2
D
N
R
P
N
P
Inhibitor
Switch
4
J-122
0.5 RED/BLK
0.5
RED/
BLU
0.5
RED/
BLU
0.5
RED/
BLU
0.5
RED/
BLU
0.5
RED/
BLU
5
J-73
5
4
J-74
Back
Light
Rear
Combi-
nation
Light
LH
Back
Light
Back
Buzzer
Rear
Combi-
nation
Light
RH
6
J-73
6
J-74
0.5
BLK
1.25
BLK
1.25 BLK
7
H-66
1.25 BLK
W/S-6
Upfitter
Install
1
J-111
Back
Buzzer
2
J-111
0.5
BLK
1.25
BLK
Refer to
Ground
Distribution
J-109
LNWG80XF006801

4497020

Description and Operation

Heated Mirror Circuit Description

The circuit consists of the mirror heater switch and the mirror heater.

When the mirror heater switch is turned ON, the mirror heater is operated.

Controller Area Network (CAN) Circuit Description

The circuit consists of the engine control module (ECM), the transmission control module (TCM), the glow plug control module (GPCM), and the instrument panel (IP) cluster. These ECU always communicate each other through the CAN circuit.

The ECM and the TCM have another CAN circuit for communicate with a scan tool. The circuit consists of the ECM, the TCM and the data link connector (DLC).

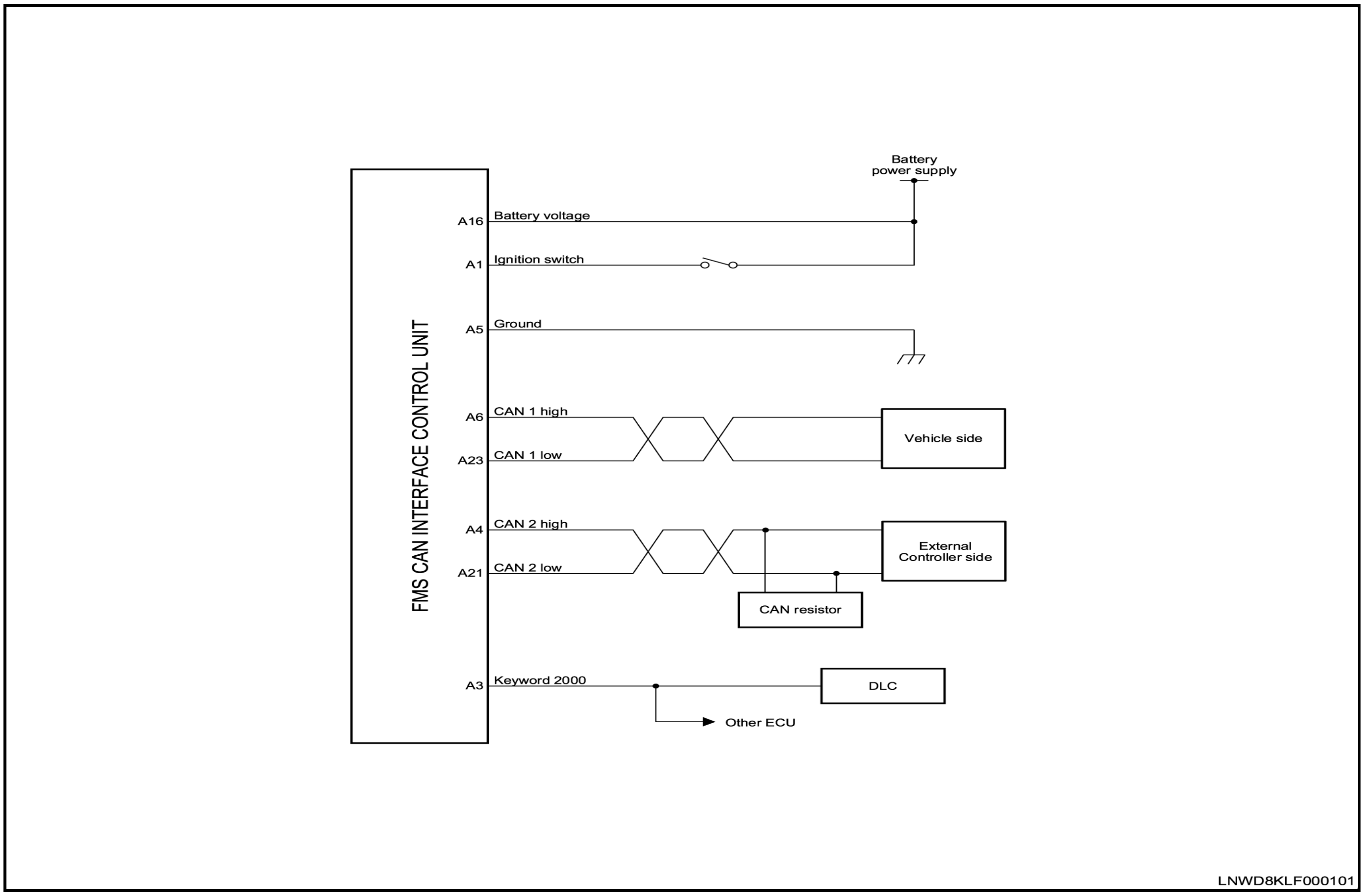
Data Link Connector Circuit Description

The Data Link Connector (DLC) is the connector for communications and connections with external diagnostic devices (scan tools) and controllers. The Diagnostic Trouble Code (DTC) stored in the ECM, TCM, Mimamori, DEF and EHCU memory can be read either through a hand-held diagnostic scanner such as external diagnostic devices plugged into the DLC or by counting the number of flashes of the light when the diagnostic test terminal of the DLC is grounded.

Vehicle Control (FMS CAN Interface)

Schematic and Routing Diagrams

FMS CAN Interface Schematics

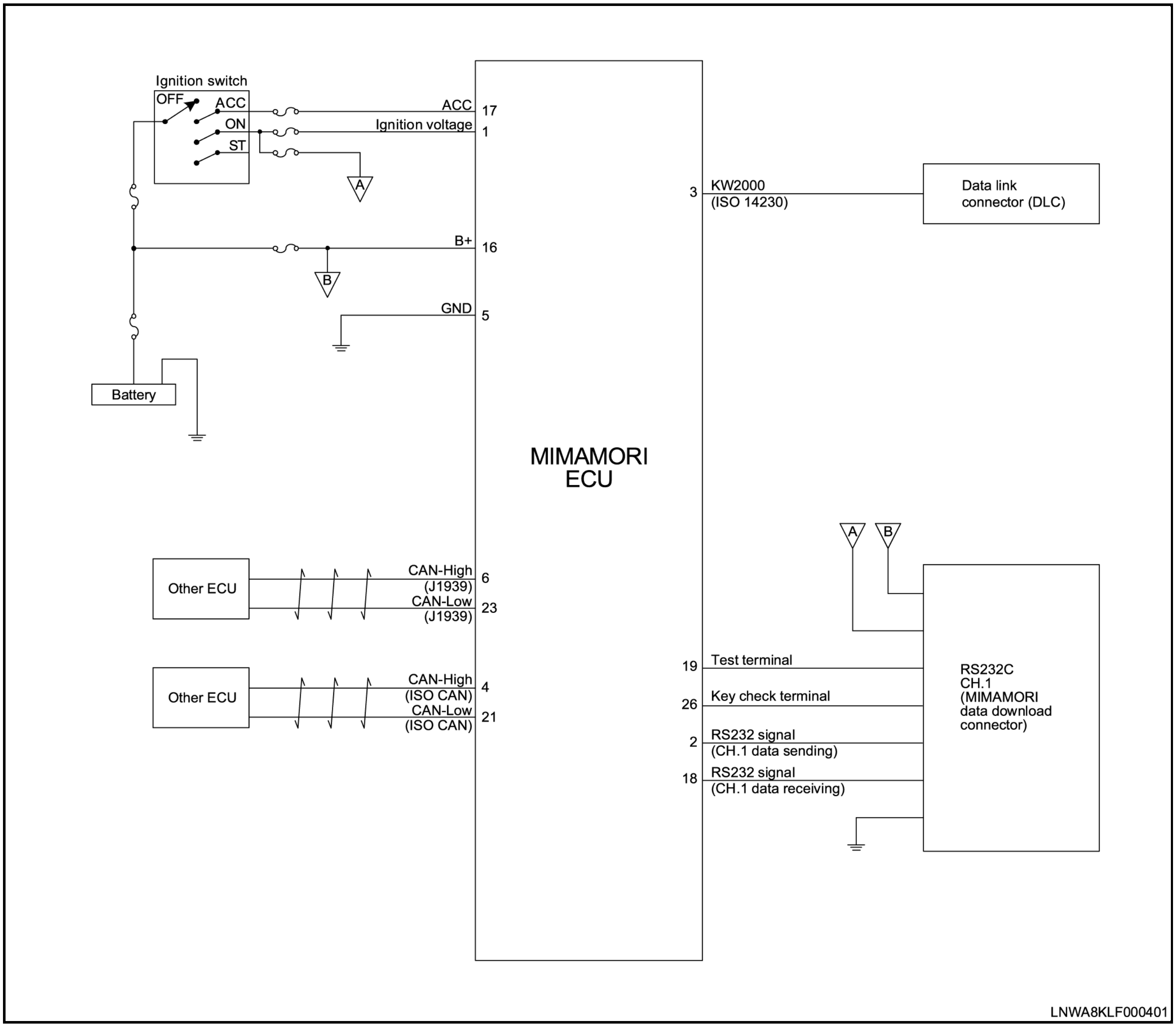

Battery power supply
A16
Battery voltage
A1
Ignition switch
A5
Ground
FMS CAN INTERFACE CONTROL UNIT
A6
CAN 1 high
A23
CAN 1 low
Vehicle side
A4
CAN 2 high
A21
CAN 2 low
External Controller side
CAN resistor
A3
Keyword 2000
DLC
Other ECU
LNWD8KLF000101

4499044

Vehicle Control (MIMAMORI)

Schematic and Routing Diagrams

MIMAMORI Schematics


Ignition switch
OFF
ACC
ON
ST
ACC
17
Ignition voltage
1
A
B+
16
B
GND
5
Battery
3
KW2000
(ISO 14230)
Data link connector (DLC)
MIMAMORI ECU
A
B
Other ECU
CAN-High
(J1939)
6
CAN-Low
(J1939)
23
Other ECU
CAN-High
(ISO CAN)
4
CAN-Low
(ISO CAN)
21
19
Test terminal
26
Key check terminal
2
RS232 signal
(CH.1 data sending)
18
RS232 signal
(CH.1 data receiving)
RS232C
CH.1
(MIMAMORI data download connector)
LNWA8KLF000401

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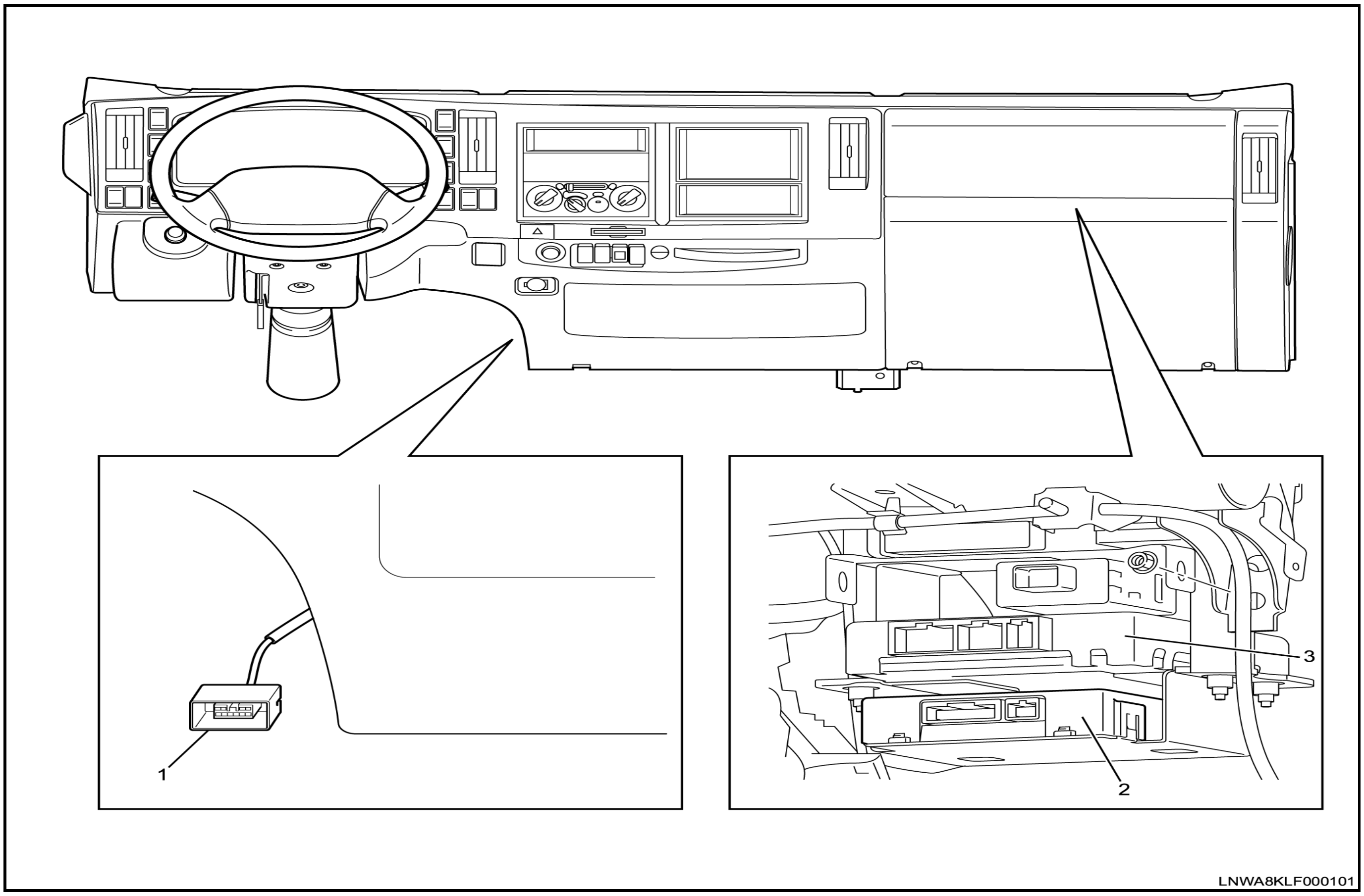
Component Locator

Component Location



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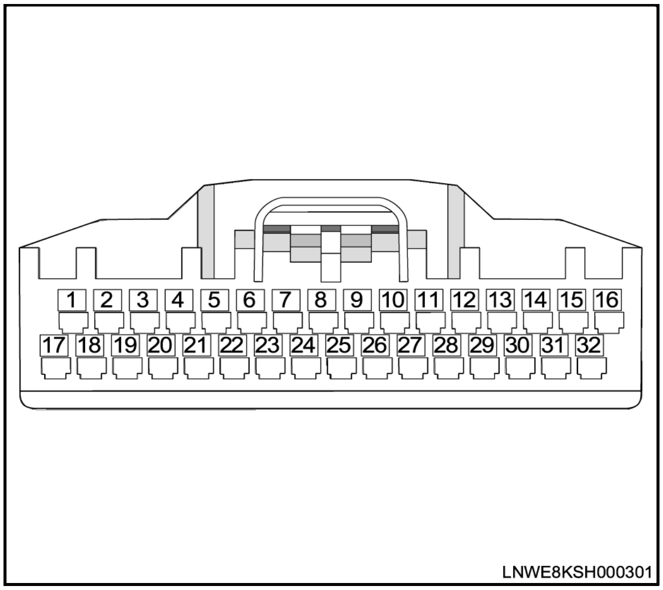
Legend

(1)	MIMAMORI Data Download Connector
(2)	MIMAMORI ECU
(3)	Transmission Control Module (TCM)

Visual Identification

Connector End Views

MIMAMORI ECU (32 Pins Connector)



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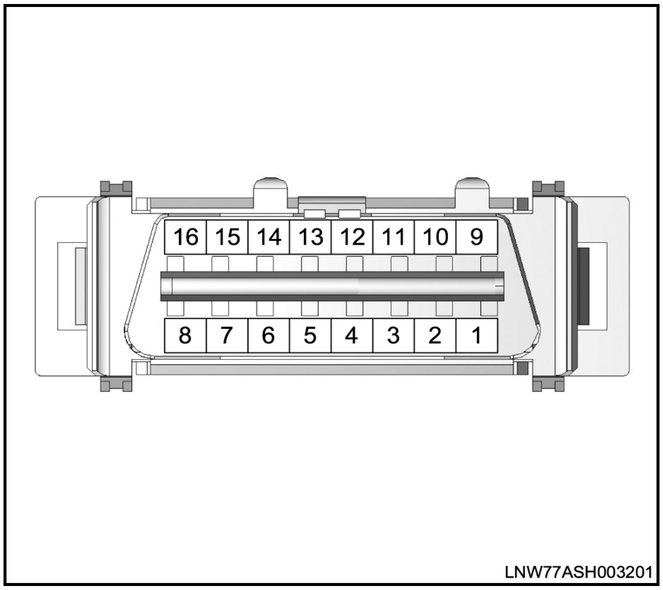
Connector No.		B402
Connector Color		Gray
Test Adapter No.		J-35616-18
Pin No.	Wire Color	Pin Function
1	VIO	Ignition voltage
2	RED/YEL	RS232 signal for data download (CH1 data sending)
3	PNK	Keyword 2000 serial data (ISO 14230)
4	GRN/WHT	CAN high signal (ISO CAN)
5	GRY	Ground
6	BLU/WHT	CAN high signal (J-1939)
7	—	Not used
8	—	Not used
9	—	Not used
10	—	Not used
11	—	Not used
12	—	Not used
13	—	Not used
14	—	Not used
15	—	Not used
16	LT BLU	Battery voltage
17	LT GRN	Accessory voltage
18	RED/GRN	RS232 signal for data download (CH1 data receiving)
19	RED/WHT	Test terminal
20	—	Not used
21	GRN	CAN low signal (ISO CAN)
22	—	Not used
23	BLU	CAN low signal (J-1939)
24	—	Not used
25	—	Not used
26	RED	Key check terminal for data download
27	—	Not used
28	—	Not used
29	—	Not used
30	—	Not used
31	—	Not used
32	—	Not used

Data Link Connector (DLC)

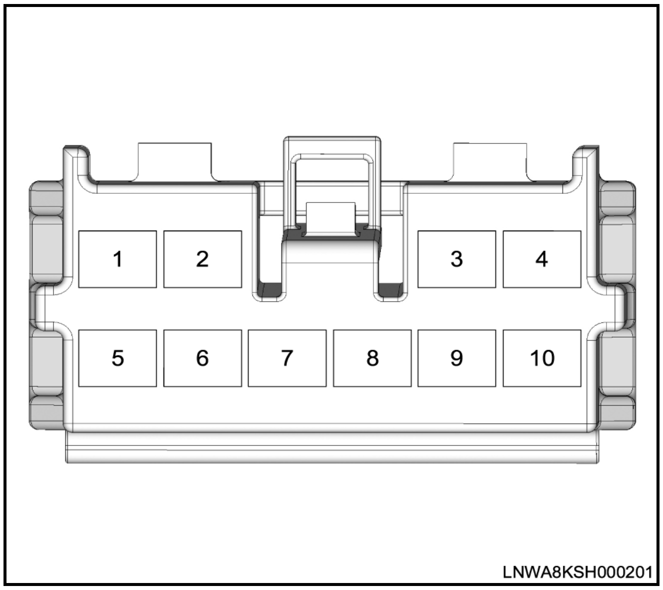


4499051

Connector No.		B31
Connector Color		Gray
Test Adapter No.		J-35616-12
Pin No.	Wire Color	Pin Function
1	—	Not used
2	—	Not used
3	—	Not used
4	GRY	Ground
5	GRY	Ground
6	GRN/ WHT	CAN high signal (GM LAN) (ECM, TCM, DEF control module, MIMAMORI ECU)

Connector No.		**B31**
Connector Color		**Gray**
Test Adapter No.		**J-35616-12**
Pin No.	**Wire Color**	**Pin Function**
7	BRN	Keyword 2000 serial data (ISO 14230) (EHCU [ABS module], MIMAMORI ECU, FMS CAN interface control unit)
8	—	Not used
9	—	Not used
10	—	Not used
11	—	Not used
12	LT GRN	Diagnostic request switch (TCM, EHCU [ABS module])
13	—	Not used
14	GRN	CAN low signal (GM LAN) (ECM, TCM, DEF control module, MIMAMORI ECU)
15	—	Not used
16	BLU	Battery voltage

MIMAMORI Data Download Connector



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Connector No.		**B120**
Connector Color		**Green**
Test Adapter No.		**J-35616-4A**
Pin No.	**Wire Color**	**Pin Function**
1	RED	Key check terminal for data download
2	—	Not used
3	RED/ YEL	RS232 signal for data download (CH1 data sending)
4	RED/ WHT	Test terminal
5	RED/ GRN	RS232 signal for data download (CH1 data receiving)
6	BLK/ BLU	Battery voltage
7	—	Not used
8	RED/ BLK	Ignition voltage
9	—	Not used
10	BLK	Ground

E
Engine Identification 1-6

I
Identification, Vehicle 1-3

M
Model Identification 1-3

R
RPO Code List 1-4

V
Vehicle Identification 1-3
VIN Derivative 1-3

BLANK